

# **JOINT FORCE FIRES COORDINATOR STUDY**



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## EXECUTIVE SUMMARY

### INTRODUCTION

*The study team examined the joint force fires coordinator (JFFC) concept from the joint force commander's (JFC) viewpoint and provides conclusions and recommendations to assist the J-7, Joint Staff in developing a Joint Staff position and a recommendation to the Chairman of the Joint Chiefs of Staff. This study uses the title "JFFC" as a point of reference for the functions and not to endorse the name.*

This study provides the J-7, Joint Staff with conclusions and recommendations regarding the joint force fires coordinator (JFFC) concept, to include development of a Joint Staff position and a recommendation to the Chairman of the Joint Chiefs of Staff. During the study period, the Army-Air Force Warfighter Conference results were released. These results included an agreement that the title "JFFC" should be changed not to connote any command authority. This study addresses the issue with significance, but uses the title "JFFC" as a point of reference for the functions and not to endorse the name. The Joint Warfighting Center (JWFC) study team examined the JFFC concept from the joint force commander's (JFC) viewpoint by identifying joint fires functions and tasks, and testing the appropriateness of their assignment to the J-3, who could be assisted by a JFFC. The definitions of fires, joint fires, and joint fire support along with the JFFC concept provided in the July 1996 final draft of Joint Pub 3-09, "Doctrine for Joint Fire Support," were used as starting points. Data was collected from the Joint Electronic Library (JEL), geographic combatant commands, Service doctrine commands, Joint Universal Lessons Learned System (JULLS), exercise observations, interviews, briefings, meetings, and library resources. The study compares the joint fires functions and tasks performed by the JFC (J-3 cognizance), joint targeting coordination board (JTCCB), joint force air component commander (JFACC), and other components. The study draws conclusions and makes recommendations about the potential JFFC impact on joint doctrine and joint targeting procedures, long-range implications, and advantages/disadvantages of establishing a JFFC.

### APPROVED JOINT DOCTRINE

*The JFC practices operational art by synchronizing the actions of air, land, sea, space, and special operations to achieve strategic and operational objectives.*

JFCs primarily exercise command and control at the operational level which links the tactical employment of forces to strategic direction. By virtue of command, **JFCs influence the outcome of campaigns and major operations by assigning missions, designating the priority of effort, prioritizing and allocating resources, deciding when and how to make adjustments, staying attuned to the needs of subordinates and seniors, and guiding and motivating the organization toward the desired end.** JFCs exercise control to help compute requirements, allocate means, and integrate efforts; and, ultimately provide a means to measure, report, and correct performance.

*A JFC is authorized to organize the staff and assign responsibilities to individual Service members assigned to the staff as deemed necessary to ensure unity of effort and accomplishment of assigned missions.*

"JFCs are provided staffs to assist them in the decision making and execution process. **The staff is an extension of the JFC; its sole function is command support, and its only authority is that which is delegated to it by the JFC.** The staff works within the commander's intent to direct and control units, keep informed of joint force activities, and advise the commander on contemplated actions. Staff members work through the staff channel to contact their counterparts at higher, adjacent, and subordinate headquarters for coordination and cooperation.

*The operations division, led by the J-3, plans, coordinates, and integrates operations.*

The Operations Division assists the commander in the discharge of assigned responsibility for the direction and control of operations, beginning with planning and following through until specific operations are completed. **The J-3 may be required to disseminate general targeting guidance; establish a JTCB; plan, coordinate, and integrate joint force information operations (IO); and coordinate combat assessment.** The JFC may delegate authority and assign responsibility for coordinating joint air operations to a staff division (e.g., J-3 Operations), a specific staff officer in a staff division (e.g., J-3 air officer), or to a special staff.

*Component commanders accomplish detailed execution planning for the use of forces and materiel under their control within their operational areas.*

Component commanders are expected to orchestrate the activities of their own forces, and must understand how their own pieces fit into the overall design to best support the JFC's plans and goals. **Within their areas of operations (AO), land and naval force commanders are responsible for the synchronization of maneuver, fires, and interdiction. The JFACC uses component priorities and the JFC's air apportionment decision to plan and execute the theater-wide air interdiction effort.** Commanders position and adjust fire support coordination measures (FSCMs) consistent with the operational situation and in consultation with superior, subordinate, supporting, and other affected commanders.

*The joint targeting process should integrate capabilities and efforts of national, unified, joint force, and component commands, all of which possess varying capabilities and different requirements.*

Targeting occurs at all levels of command within a joint force and by forces capable of attacking targets with both lethal and nonlethal means. **Targeting is complicated by the requirement to deconflict duplicative targeting and synchronize the attack of those targets with components of the joint force.** The targeting cycle has six phases: commanders objectives and guidance, target development, weaponeering assessment, force application, execution planning/force application, and combat assessment.

*The JFC provides targeting guidance, objectives, and priorities; and typically organizes and defines the role of a joint targeting coordination board (JTCB). The JTCB should maintain a macro-level view of the area of responsibility (AOR)/joint operations area (JOA) targeting effort.*

**The JFC's targeting guidance and objectives identifies targeting priorities, joint target list (JTL)/joint integrated prioritized target list (JIPTL) planning guidance, procedures, appropriate maneuver and movement control, joint FSCMs, rules of engagement (ROE), air apportionment decision, and a definition of component direct support sorties. The JFC may establish and task an organization within the JFC's staff (e.g., JTCB) to accomplish broad targeting oversight functions, or may delegate the responsibility to a subordinate commander (e.g., JFACC). Typically, the JTCB reviews targeting information, develops targeting guidance and priorities, maintains a complete list of restricted targets, ensures targeting nominations are consistent with the JFC's campaign plan, and may prepare and refine joint target lists**

*The joint force air component commander (JFACC), if designated, uses inherent and liaison team expertise to coordinate, deconflict, and synchronize joint air targeting; and conduct execution planning.*

The JFC will normally delegate the authority to conduct joint air targeting execution planning, coordination, and deconfliction to the JFACC/JFC staff and will ensure that this process is a joint effort. All components develop and nominate targets that are outside their AOs or exceed the capabilities of organic and supporting assets. **The JFACC integrates, deconflicts, prioritizes, and synchronizes the nominated targets, and allocates and matches air capabilities/forces against the targets' vulnerabilities.** The components provide liaison teams, such as the battlefield coordination detachment (BCD), to integrate and coordinate their participation in joint air targeting and operations.

*Joint doctrine treats maneuver, interdiction, and fires as complementary.*

JFC's synchronize maneuver and interdiction. **JFC's use maneuver for positional advantage to deliver firepower against enemy centers of gravity.** Interdiction may be used to enable or enhance maneuver. Land and naval component commanders synchronize maneuver, fires, and interdiction within their AOs by designating target priority, effects, and timing. Joint fire support includes those fires which require detailed integration with the scheme of maneuver.

## DOCUMENTED JOINT FIRES FUNCTIONS/TASKS

*The Universal Joint Task List (UJTL) employment of firepower is a major task found at all levels-strategic national through tactical.*

**Universal Joint Task List (UJTL) task OP 3, EMPLOY OPERATIONAL FIREPOWER,** describes the employment of operational firepower as using lethal and nonlethal means to defeat enemy forces or to maintain freedom of movement. Firepower refers to the delivery of all types of ordnance to include bombs, rockets, missiles, and artillery, as well as other nonlethal means against enemy targets at operational depths. Operational firepower is, by its nature, primarily a joint/multinational task. The UJTL further outlines related tasks (e.g., preparing plans/orders, conducting targeting, attacking targets, synchronizing/integrating operations) and their subordinate tasks (establishing targeting guidance, developing targets, publishing tasking order, synchronizing firepower).

*Some JFCs (e.g., US Atlantic Command, joint task force commanders) employ the JFFC with a supporting cell along with a JTCB and JFACC in their SOPs and orders. Others (e.g., US Central Command, Combined Forces Command Korea) use the JTCB and JFACC to conduct joint fires coordination.*

Some combatant commands and many of the Service force headquarters who may be established as a nucleus JTF headquarters have developed **SOPs, orders, and other documents** to provide guidance regarding various joint fires tasks, actions, and functions. **Numerous JFC's use the J-3, aided by the JFFC or a fires/targeting/battle staff cell, to perform staff estimates, prepare joint fires portions of plans/orders, develop targeting guidance, and document JFC and JTCB decisions.** The JFC, through the J-3, issues fragmentary/attack orders to components executing joint fires or fire support for another component that are not on the ATO. **JFCs typically task the J-3 or JFACC to organize, operate, and support a JTCB** to provide a principal forum for discussion of component targeting requirements and integration of joint fires. **JFCs normally designate a JFACC to coordinate and synchronize joint air operations.** JFACCs are tasked to develop the air apportionment recommendation, a JIPTL, master air attack plan (MAAP), ATO, and direct/redirect attack of targets with assets allocated by JFCs.

*The J-3/JFFC primarily assists the JFC in developing targeting guidance which is used by the JFACC to develop a JIPTL which is reviewed by the J-3/JFFC and JTCB to ensure it supports the JFC's plan. The JFACC primarily conducts weaponeering and force application, execution planning, and force execution. The J-3 directs and integrates the overall combat assessment effort.*

**The JFC at any level is responsible for providing targeting guidance, objectives, and priorities; and the J-3, JFFC (if assigned), and/or JTCB primarily assist in the effort,** to include reviewing and refining this guidance throughout the joint operation. The development and nomination of lethal and nonlethal targets are conducted by various members of the joint force, to include the J-2 (JTL), J-3/JFFC (restricted/protected, IO, high payoff target list (HPTL)), JFACC (air interdiction), and components who nominate targets for attack that exceed their capabilities. Generally, the JFACC is used to consolidate, review, deconflict, and prioritize nominated targets. **The outcome of the target development phase is a JIPTL which the JFACC provides to the J-3/JFFC for review, and briefs to the JTCB for JFC approval.** Some commands operate a JTCB under the JFACC, and, in those cases, the JTCB is a "hands-on" organization in developing and refining the target list. **The JFACC primarily conducts weaponeering and**

**force application actions** to determine target attack objectives; develop target descriptions; allocate air assets, recommend the number/type of weapons, delivery platform, and aim point; identify target area threats; and develop the probability of destruction. The usual product is a MAAP or master attack plan (MAP). **The JFACC has the bulk of effort and responsibility for joint fires execution planning and force execution through development of an ATO and supervision of its execution.** Some JFCs use the JFFC to assist the J-3 in preparing taskings for nonair strikes (e.g., SOF direct action), or may coordinate cross-Service surface-to-surface fire support. **The J-3 directs and integrates the overall combat assessment effort and the JTCB monitors the evaluation of battle damage assessment (BDA) for the JFC.**

*The J-3 is the focal point for synchronization of joint fires with other joint operations.*

**The J-3 is charged with planning, organizing, coordinating, integrating, synchronizing, and directing joint operations for the JFC.** As such, the J-3, assisted by the JFFC and/or JTCB, should provide campaign assessments to anticipate future operations, appraise adherence to targeting guidance and priorities, maintain a joint fires logistic awareness, and ensure IO coordination. The JFACC should evaluate results of air operations regarding the campaign and provide them to the JFC.

*Some JFCs allow the J-3/JFFC to coordinate cross-Service surface-to-surface fire support while the JFACC coordinates close air support (CAS).*

The J-3, or JFFC if established, recommends, reviews, coordinates, and publishes theater/JOA FSCMs. **The coordination of cross-Service surface-to-surface fire support can be a JFFC function.** The JFACC or J-3 determines the need; coordinates; and redirects, diverts, or otherwise changes air attacks in a timely manner.

## LESSONS LEARNED FROM JOINT EXERCISES

*Joint Universal Lessons Learned System (JULLS) entries indicate confusion regarding the targeting and joint fires coordination roles of the JFACC, JTCB, and JFFC, but also indirectly support the JFFC concept to clarify and disseminate targeting guidance and joint fires information.*

Twenty-eight pertinent post-1990 JULLS entries from three joint operations and 10 joint exercises were selected. Most of the observations, discussions, and lessons learned centered around confusion over the exact roles of the JFC, JFFC (1 operation and 3 exercises), JFACC, and JTCB regarding targeting or joint fires coordination, along with establishment of FSCMs and other procedures. **Generally, JULLS entries indirectly support a JFFC concept to assist the JTCB, disseminate targeting and FSCMs data, clarify the commander's intent and guidance, integrate IO targeting, and establish SOPs and standards regarding targeting or joint fires coordination, etc.**

*A JFFC was used in Exercise UNIFIED ENDEAVOR 97-1 (UE 97-1) and the study team interviewed key participants, many who generally endorsed the position as a J-3 special staff officer/advisor with no directive authority focused on future joint fires planning and synchronization of joint fires with maneuver.*

Study team members conducted informal interviews with key UNIFIED ENDEAVOR 97-1 (UE 97-1) participants including two senior mentors. Generally the interviewees indicated the JFC needed a JFFC to be the impartial arbiter for joint fires, manage scarce resources, ensure the commander's guidance is being followed and intent accomplished, maintain a focus on what to preserve or destroy, deconflict lethal and nonlethal fires, champion JFC fires needs, and help the JFC maintain situational awareness. Some noted that without a JFFC, there is deconfliction, but not necessarily synchronization of all joint fires. **Overall, interviewees saw the JFFC's role as a J-3 special staff officer--joint fires planner and execution monitor focused on future fires across the whole JOA. Some interviewees felt the JFFC functions should migrate toward synchronization of maneuver and interdiction.** Over the phases of an operation, the JFFC would assist in formulating and disseminating JFC intent



and be an advisor on all fires, while the JFACC advises the JFC on air operations. During the targeting cycle, the JFFC is active in targeting guidance and targeting information review and dissemination while the JFACC is prominent in target development, weaponeering, force application, and execution. The interviewees noted JFFC products are the fires estimates for courses of action development, commanders targeting guidance, JIPTL review, and the targeting bulletin message. One interviewee felt the JFFC's review of the JIPTL was unnecessary since the JFACC ensures a target traces to a JFC objective; another felt the JFFC should develop the JIPTL instead of the JFACC since it did not seem to conform to JFC priorities. All agreed the JFFC needs a staff to be effective and credible, and the senior mentors noted the joint community needs to "grow a JFFC" as done during development of the JFACC concept.

*The UE 97-1 JFFC and cell was effective in developing and disseminating targeting guidance, but had limited success ensuring components' targeting was synchronized with the JFC's plan--the JFACC coordinated and prioritized joint air targets, but the JIPTL did not always reflect synchronization with the JFC's plan.*

The study team reviewed the UE 97-1 OPORD, attended all JTCB meetings, and observed other events. **It was apparent the JFFC played a large role in developing the JFC's concept of fires and priorities; preparing the JTCB agenda and briefs; and disseminating JTCB decisions, modified targeting guidance, and targeting information.** The JFACC produced an initial JIPTL that generally conformed to the JFC's flexible deterrent options and JTCB satisfaction until a previously unplanned forcible entry was developed by the joint planning group (JPG). The transition between JIPTLs would have been eased by earlier JFFC coordination with the JFACC and timely transmission of the revised JIPTL to the JFFC for review. The JFFC had some "value added" by clarifying targeting guidance, but fell short of observer expectations because the JIPTL could not be reviewed prior to the JTCB meetings. **Overall, the JFFC was hampered by a lack of manning, expertise, training, and C4 systems support.**

*UE 96-2 and 97-1 observer/trainers (OT) comments indicated the JFFC had a practical role in planning and coordinating lethal and nonlethal joint fires, but the lack of joint doctrine is creating confusion regarding JFFC functions, manning, C4 systems support, and relationships with the JFACC and JTCB.*

The JFFC, with a supporting cell of no more than 12, was used in UE 96-2 and 97-1. USACOM observer/trainers (OT) provided comments which the study team reviewed. **During UE 96-2, the Deputy CJTF viewed the JFFC's role as the coordinator and synchronizer of all JTF fires, JTCB executive agent, and JIPTL examiner.** The JFFC saw three cell possibilities: large to do all targeting and systems analysis; medium (10-12 per shift) to synergize all lethal and nonlethal fires through planning and execution; or small (about 5) to primarily help the JTCB with targeting guidance and JIPTL compliance. Overall, OT comments noted the JFFC must be active in the preparation of COA estimates and the OPORD "Fires" appendix, CJTF targeting guidance, validating the JIPTL with JTF and component priorities, special operations fire support, TLAM fires, and coordination of lethal and nonlethal fires. OTs also highlighted the importance of information flow to the JFFC, endorsed the need for JFFC doctrine, and noted a too aggressive JFFC can adversely affect JFACC efforts.

## POSITION PAPERS & OTHER INTERVIEWS AND LITERATURE

*Position papers from US European Command, Headquarters, Department of the Army, US Army Training and Doctrine Command, Marine Forces Pacific, and the recent*

Several commands responded to study team requests with position papers. **US European Command believes the JFFC, if established, should be a JFC staff function under the J-3 to assist in the planning and synchronization of all fires.** Their paper noted an important distinction between fires planning/synchronization at the JFC level, and fires execution planning and execution at the component level. Marine Forces

*Army-Air Force Warfighter Conference generally supported the JFFC concept as an option to assist the J-3 in planning and synchronizing all joint fires. The Air Force Doctrine Center dissented by noting JFFC “value added” has not been observed in joint exercises.*

*The Operation UPHOLD DEMOCRACY JFFC indicated the JFFC needed to manage the JIPTL development. The January 1997 preliminary coordination draft of Joint Pub 3-09, “Doctrine for Joint Fire Support,” endorses a joint fires element (JFE) as an option under the JTF J-3.*

*The JFC focuses on campaign planning; component commanders focus on execution planning.*

*JFCs rely on the J-3 to plan, coordinate, integrate, and synchronize joint fires with all other operations in support of the JFC’s campaign/OPORD. J-3 joint fires functions are extensive enough to require the assistance of a JFFC and cell.*

Pacific (MARFORPAC) believes the JFFC concept has merit by providing the J-3 with recommendations to accomplish the full range of fires planning and synchronization in sustained combat operations. US Army Training and Doctrine Command mirrored MARFORPAC comments and supports having the JFFC with a supporting staff included as an option in joint doctrine. Air Force Doctrine Center (AFDC) referenced several joint exercises which used the JFFC concept and noted most of the duties already were performed by the JFACC and the JFFC did not have the manpower or equipment to do assigned tasks, AFDC saw no “value added.” Headquarters, Department of the Army supported the JFFC as the JFC’s option to augment the J-3 as a special staff officer, principal joint force fires advisor, and focal point for joint force staff input to targeting, fire planning, and synchronizing joint fires. The results of the 4-5 December 1996 Army-Air Force Warfighter Conference indicated agreement on the JFFC concept as an option for JTFs which should be given a name that does not connote any command function.

**Two former JFFCs, including the JFFC from Operation UPHOLD DEMOCRACY, were informally interviewed. Each felt the JFFC needed to manage the JIPTL development to ensure overall targeting supports the CJTF. One noted that in an Operation DESERT STORM scenario, the JFFC probably would just work target sets, not individual targets. Other literature from library searches did not directly reference the JFFC. The recent Preliminary Coordination Draft of Joint Pub 3-09, “Doctrine for Joint Fire Support,” indicates a shift from the JFFC to a joint fires element (JFE) as an option under the JTF J-3. The JFE should serve as the focal point for integrating and synchronizing targeting guidance, fires planning, and staff efforts in joint fires.**

## ANALYSIS RESULTS

**The JFC focuses on providing broad guidance, priorities, and objectives, while the component commanders apply the JFC’s guidance during execution planning.** The JFC is concerned with arranging the activities of each component in time, space, and purpose, while the component commanders are concentrating on synchronizing their operations (air, land, sea, or special operations).

**The J-3 supports the JFC in planning, organizing, coordinating integrating, synchronizing, and directing all operations.** For example, the J-3 should be concerned with developing clear, concise guidance, plans, and/or orders for JFC approval; ensuring they are understood and disseminated; and establishing and operating systems to keep the staff and components focused on the campaign/operation plan. The J-3 normally will not be involved in the details of execution planning, but selected details of component operations and capabilities must be provided to the J-3. **The joint fires aspects of J-3 functions are extensive enough to require the assistance of a full-time JFFC and cell.** Potential JFFC tasks center around the J-3’s responsibilities regarding COA, OPORD, and target list development; providing/refining targeting guidance; operating a JTCB; reviewing targeting information; ensuring component compliance with JFC intent/guidance; disseminating targeting information/FSCMs; and coordinating combat assessment (CA).

*JFCs usually have relied on the JFACC as their joint fires coordinator; JFACCs plan, coordinate, integrate, and synchronize air delivered joint fires. JFACCs usually cannot ensure full coordination of all joint fires.*

*The level of effort and influence a J-3/JFFC or JFACC has over joint fires planning and execution is systemic and mission dependent.*

*The JTCB assists the JFC in a macro-level review of targeting information/guidance and ensures component commander concerns are heard. The JTCB tasks require far more time and effort than a group of senior officers meeting for an hour can or are willing to provide. Hence, supporting agents like the JFFC have evolved.*

*Joint fires task duplication exists between the JTCB and the notional JFFC, which is acceptable since the JTCB is not a full time activity. JFFC assumption of JIPTL development, currently a JFACC task/capability, may be preferred by some JFCs, which may be resisted and create a temporary duplication of capabilities until the issue is refined through doctrine, training, and experience. This study does not*

**The JFACC is unique among joint force components because of theater/JOA-wide joint fires responsibilities and, usually, majority ownership of deep-attack capabilities.** The JFACC does conduct joint fires coordination by producing a JIPTL and an ATO, conducting close air support (CAS), and supervising the execution of the ATO. The JFACC has been organized and procedures have been developed to accommodate these tasks. The thrust of JFACC tasks, either during the phases of an operation or the targeting cycle, center around execution planning and execution of joint air targeting and joint air operations. The JFACC plans, coordinates, integrates, and synchronizes joint fires that are air delivered in support of the JFC's plan. The JFACC has some limitations regarding control of all joint fires resources (e.g., TLAM, ATACMS) and awareness of special operations and nonlethal strategies, thus an opportunity may exist to not consider all joint fires aspects during development of the air plan.

**The level of effort and influence a J-3/JFFC or JFACC has over joint fires in support of the JFC is systemic and mission dependent.** Situation urgency may require an immediate joint fires response during a deterrent phase by the JFACC acting as the advance force commander while the joint force headquarters is being formed or remains in the rear. Once established, the J-3/JFFC may begin to influence subsequent phases of an operation (lodgment, decisive combat) through more deliberate joint fires planning as other component capabilities in the theater/JOA build and the need for synchronization with other operations develops. Figures III-1 and III-2 in Chapter III of this report illustrate J-3/JFFC and JFACC joint fires tasks differences during joint operation phases and the targeting cycle.

The JTCB directly supports the JFC and component commanders by providing a forum for senior leadership to review targeting information, the air apportionment recommendation, and CA data. **JTCB tasks center around JIPTL adequacy regarding compliance with JFC's guidance/priorities and component priorities, JFC targeting guidance review and refinement, JFACC air apportionment recommendation endorsement, nonair targeting, and BDA evaluation.** The JTCB targeting information and guidance review functions are, in practice, performed on a 24-hour/day basis; not just during a one-hour information/decision briefing. Consequently, the JTCB either has evolved into an executive board supported by subordinate cells (targeting, synchronization, planning), become a marathon meeting of busy people, or required J-3 and J-2 personnel assistance.

Joint fires tasks duplication primarily exists between the documented functions and tasks of the JFFC in SOPs and those outlined for the JTCB; however, this situation is not undesirable. The JTCB specified and implied tasks, such as reviewing the JIPTL/BDA, developing/refining JFC's targeting guidance, and documenting JTCB actions, really require full-time attention and support. **A conflict of interest and temporary duplication of JFACC capabilities can emerge if the JFFC is authorized to develop the JIPTL.** Potential for JFFC assumption of JIPTL development, which is currently a JFACC targeting task/capability, exists, depending on JFC predilection. JIPTL development is key to the synchronization of joint fires with the JFC's plan. JIPTL development also may migrate to the JFFC as the joint force headquarters' role and nonair weapons systems evolve. Diverting this task from the JFACC to the JFFC may be resisted since it is integral to ATO development. This study does not propose to migrate JIPTL development to

*propose to migrate JIPTL development to the JFFC, but prudent analysis needs to identify the possibility.*

*The JFFC has potential “value added” by assisting the J-3 and JFC in synchronizing joint fires with other aspects of the campaign such as maneuver, IO, special operations, and logistics.*

*A JFFC concept void in joint doctrine, along with a misleading title, have hindered development of the JFFC’s role, functions, training, and organization.*

*The study data supports outlining the JFFC concept in developing joint doctrine as an option; the title is not important, but the associated functions and tasks along with where they are performed are vital to its acceptance and development.*

*Adopting the JFFC provides an improvement in joint operations efficiency regarding synchronization of joint fires with the JFC’s campaign plan; this is*

the JFFC, but prudent analysis needs to identify the possibility. Accordingly, potential for a conflict of interest and temporary duplication of capabilities exists until the issue is refined through doctrine, training, and experience. The potential for JFFC involvement in CAS coordination exists since components often go to higher headquarters for satisfaction.

**The JFFC’s overarching “value added” is tied directly to the JFC’s inherent requirement to synchronize maneuver and interdiction.** Both the JFACC and JTCB are involved in the coordination and synchronization of joint fires, but they are limited by time or position, and cannot fully synergize the joint fires piece and other pertinent operations such as maneuver, IO, special operations, and logistics. Further, the JFFC can perform an invaluable function by translating the JFC’s intent and concept of operations into clear, workable targeting guidance and priorities. The JFFC can help reduce confusion by clearly defining desired weapons effects (e.g., destruction, neutralization, degradation).

**Joint force efficiency and working relationships are limited by a lack of JFFC doctrine.** Some JFCs strongly support the JFFC concept and have established the position with a supporting cell under the J-3. However, the JFFC and cell often has been plagued by inadequate manning, expertise, training, C4 systems support, and nonacceptance by joint force members. The idea of having a JFFC on the JFC’s staff has been difficult to accept because commanders generally are assigned critical coordination functions in joint operations (e.g., joint rear area coordinator, airspace control authority) or are designated coordinating authorities for specific functions (e.g., air component commander (ACC) is coordinating authority for all fires between the fire support coordination line (FSCL) and the deep battle synchronization line (DBSL) in Korea).

## CONCLUSIONS

The data supports including the JFFC’s role, functions, and duties in developing publications like JPs 3-09, “Doctrine for Joint Fire Support,” and 3-56, “Command and Control Doctrine for Joint Operations.” **The title of the action agent and/or cell is unimportant--the descriptions of the joint fires functions and tasks and where they are performed are key to the concept’s ultimate utility.** The JFFC concept is not universally applicable and should be considered a JFC staff option--operations with little or no maneuver or primarily air delivered ordnance may not require a JFFC. The level of effort and influence of a JFFC regarding joint fires planning and advice is mission dependent and can vary with the phases of an operation. JFFC acceptance in joint doctrine will introduce a ripple effect, beginning with further JFFC experimentation, followed by documented feedback, and culminating with an effort to refine the JFFC’s role. JFCs could modify their SOPs to assign JIPTL development and refinement to the JFFC rather than the JFACC. This issue also will surface during development of Joint Pub 3-60, “Joint Doctrine for Targeting.”

**The JFFC should yield improved joint operations efficiency through synchronization of joint fires with other elements such as maneuver, IO, special operations, and logistics.** The JFFC cost will be increased personnel augmentation, training, and C4 systems support requirements. Additionally, ill-defined responsibilities and functions may introduce the

*accompanied by a moderate price in personnel, training, and C4 system support.*

JFFC as an obstacle to the efficient joint fires coordination efforts of the JFACC, BCD, and/or JTCB.

## RECOMMENDATIONS

*Establish in joint doctrine that the coordination, integration, and synchronization of joint fires with other major elements of the campaign is a J-3 function along with establishing and serving as a member of the JTCB. Further, establish that the J-3 may be assisted by a senior subordinate (e.g., Joint Fires Officer) with a supporting cell (e.g., Joint Fires Element).*

Establish in Joint Pubs 3-09, "Doctrine for Joint Fire Support," and 3-56, "Doctrine for C2 of Joint Operations," the below listed joint fires coordination functions and tasks as J-3 responsibilities. Further, establish that the J-3 may be assisted, depending on the level of effort and operational situation, by a senior subordinate (e.g., Joint Fires Officer) with a supporting cell (e.g., Joint Fires Element).

- **Serve as principal staff advisor to the JFC responsible for the coordination, integration, and synchronization of joint fires with other major elements of the campaign/operation such as maneuver, information operations, special operations, and logistics.** This function may include (1) development of joint fires estimates for COA development/refinement, (2) development and promulgation of a joint fires appendix to the OPOD, (3) periodic assessments of "joint fires" support of the campaign/operation, (4) development of joint targeting guidance, objectives, and priorities for JFC approval, (5) delineation of desired weapons effects and timing of those effects primarily for high value and high payoff targets, (6) development and promulgation of joint targeting procedures, (7) coordination of combat assessment efforts by the joint force, (8) recommendation, coordination, review, designation, and dissemination of FSCMs, and (9) maintenance of current joint fires operations and logistics awareness.
- **Establish and serve as a member of the JTCB** responsible for (1) development of the role, functions, and agenda of the JTCB for JFC approval, (2) review of targeting information as it pertains to JFC targeting guidance, objectives, and priorities, and (3) executive assistant for administrative and logistic support.

*Address JIPTL development and refinement in Joint Pub 3-60, "Joint Doctrine for Targeting."*

**Address JIPTL development and refinement responsibilities in Joint Pub 3-60, "Joint Doctrine for Targeting."**

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## CHAPTER I

### INTRODUCTION

#### SECTION A: PURPOSE

This report provides results of the study requested by the Chief of Joint Doctrine Division, J-7, Joint Staff (Appendix A), to analyze the joint force fires coordinator (JFFC) concept while considering advantages/ disadvantages, long-range implications, impact on joint doctrine and joint targeting procedures, and lessons learned from joint exercises. It discusses findings and provides analysis, conclusions, and recommendations. The results will be used to develop a Joint Staff position and provide a recommendation to the Chairman of the Joint Chiefs of Staff.

#### SECTION B: ASSUMPTIONS

During the study period, the Army-Air Force Warfighter Conference results were released. These results included an agreement that the title "JFFC" should be changed not to connote any command authority. This study addresses the issue with significance, but uses the title "JFFC" as a point of reference for the functions and not to endorse the name. Further, the report assumes some foundation concepts to maintain a workable scope and accomplish its purpose. Accordingly, the concepts of "joint fires" and "JFFC" outlined in the final draft of JP 3-09, "Doctrine for Joint Fire Support," of July 1996 are used as starting points for this study. The term "joint fires" refers to fires (lethal or nonlethal weapons effects) performed with capabilities/forces made available by components in support of the joint force commander's (JFC) operation or campaign objectives, or in support of other components of the joint force. The term "JFFC" is used in this document to describe the proposed J3 staff officer primarily concerned with the coordination and synchronization of joint fires who could have a supporting cell of undetermined size.

#### SECTION C: METHODOLOGY

1. **Study Team.** The study was conducted by a member of the JWFC's Doctrine Support Group from OC, Incorporated and a JWFC doctrine division action officer. The primary members were supported by the full resources and expertise resident within the JWFC.
2. **General Approach.** The team examined the JFFC concept from the JFC's point of view. The thrust was to identify all pertinent joint fires functions and tasks and associate them with joint force agents who could assist the JFC in accomplishing those functions and tasks. Likely JFFC functions and tasks were examined for suitability, efficiency, duplication, and value added to determine the potential role and utility of the JFFC.

### 3. Data Collection

#### a. Research

(1) The Joint Electronic Library (JEL) was used extensively to identify pertinent joint fires functions and tasks approved in joint doctrine and shown in the Universal Joint Task List (UJTL). Pertinent responsibilities, functions, roles, and tasks for the JFC, joint force staff, joint targeting coordination board (JTCB), joint force air component commander (JFACC), and component commanders were gathered using keyword searches. Approved terms and definitions associated with the search are included in the Glossary.

(2) The geographic combatant commands and Service doctrine commands were asked to provide appropriate excerpts from standard operating procedures (SOP) and directives, and current position/information papers. Appendix B (Bibliography) contains a listing of those relevant sources that were provided and reviewed.

(3) The Joint Universal Lessons Learned System (JULLS) was searched for all entries pertaining to “fires,” “fire support,” “JFFC,” “JTCB,” “targeting,” and exercises and operations in which a JFFC was applied.

(4) Published articles, studies, reports, comments, and messages retrieved from library searches and action officer files were reviewed. Relevant items are listed in Appendix B.

#### b. Exercise Observations. Due to time constraints, the study team was limited to observing one exercise and gathering comments from another.

(1) The study team observed Exercise UNIFIED ENDEAVOR 97-1 (UE 97-1) events, to include all JTCB meetings, and reviewed raw and/or refined observations provided by USACOM observer/trainers (OT) and doctrine personnel.

(2) Raw observations from USACOM OTs and doctrine personnel involved in Exercise UNIFIED ENDEAVOR 96-2 (UE 96-2) also were reviewed.

#### c. Interviews

(1) Informal interviews and discussion were conducted with key UE 97-1 participants and exercise personnel. The interviewees included two Senior Mentors, the JTCB chairman, the exercise JFFC and deputy JFFC, the JFACC liaison officer, Joint Command and Control Warfare Center (JC2WC) representative, and the senior JFFC observer trainer.

(2) Informal interviews and discussions also were conducted with the UE 96-2 JFFC, the Exercise AGILE PROVIDER 94 JFFC, the Operation UPHOLD DEMOCRACY JFFC, members of the JWFC’s after-action review team, and key USPACOM members.



d. Briefing and Meetings

(1) A member of the USACOM JTF Training Division (J75) provided a brief on the JFFC concept which also is provided to exercise JTF members. A question and answer session provided additional data.

(2) Team meetings and meetings with representatives of the US Army Training and Doctrine Command (TRADOC) and HQDA provided insight into the US Army intended functions of a JFFC.

4. **Analysis, Conclusions, and Recommendations.** The goal of the analysis was to examine the essential joint fires functions/tasks and determine which, if any, should be performed by the JFFC--thereby deriving the JFFC's overall utility to the JFC. Judgments regarding the effectiveness and suitability of an agent performing a given joint fires task were made based on established doctrine and SOPs, real-world examples, lessons learned, impact on joint doctrine and joint targeting procedures, and long-range implications to training and resources. Comparisons of the joint fires functions performed by various agents during crisis action planning (CAP), joint operations phases (e.g., prehostilities, lodgment, etc.), and the targeting cycle were illustrated. Conclusions and recommendations were drawn from the analysis.

#### **SECTION D: ADMINISTRATIVE INSTRUCTIONS**

Questions concerning this report may be addressed to the JWFC.

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## CHAPTER II

### DATA SUMMARIES

#### SECTION A: APPROVED JOINT DOCTRINE

##### 1. Role of JFC in Joint Operations

a. General. An overarching operational concept and key function of the JFC is to “. . . **synchronize the actions of air, land, sea, space, and special operations forces** to achieve strategic and operational objectives through integrated, joint campaigns and major operations. The goal is to increase the total effectiveness of the joint force . . . .”<sup>1</sup> This function is essential to practicing joint operational art because “Joint operational art looks not only at the employment of military forces but also at the arrangement of their efforts in time, space, and purpose.”<sup>2</sup>

b. Planning. To practice operational art and accomplish central synchronization tasks, JFCs apply fundamental elements such as synergy, simultaneity and depth, situational awareness, balance, leverage, timing and tempo, operational reach, phasing, centers of gravity, and decisive points.<sup>3</sup> These fundamental elements provide the basis for plans and orders which set forth the mission, commanders intent, concept of operations, and concept of logistics along with the **JFC’s targeting priorities and guidance, and air apportionment decision**.<sup>4</sup> Other considerations like the use of command and control warfare (C2W) composed of deception, psychological operations (PSYOP), operations security (OPSEC), electronic warfare (EW), and physical destruction are also included in plans and orders.<sup>5</sup> **“JFCs employ various maneuver and movement control and fire support coordinating measures to facilitate effective joint operations.”**<sup>6</sup>

c. Execution. “JFCs issue prioritized mission-type orders to subordinate commanders and define command relationships to facilitate mission accomplishment consistent with their concept of operations.”<sup>7</sup> “JFCs will normally seek to secure air and maritime superiority early in the conduct of joint operations,” and may immediately attack enemy strategic centers of gravity and conduct special operations.<sup>8</sup> Prevention of fratricide is a major concern and JFCs must promote command emphasis, close coordination among component commands, and enhanced situational awareness.<sup>9</sup> “During sustained (combat) operations JFCs simultaneously employ air, land, sea, space, and SOF.”<sup>10</sup> They use the attack of enemy strategic centers of gravity, **synchronization of maneuver and interdiction**, fire support, joint precision interdiction, and combat assessment to extend operations throughout the breadth and depth of the operational area.<sup>11</sup>

d. Summary. JFCs primarily exercise command and control at the operational level which links the tactical employment of forces to strategic direction.<sup>12</sup> By virtue of command, JFCs influence the outcome of campaigns and major operations by assigning missions, designating the priority of effort, prioritizing and allocating resources, deciding when and how to make

adjustments, staying attuned to the needs of subordinates and seniors, and guiding and motivating the organization toward the desired end.<sup>13</sup> JFCs exercise control to help compute requirements, allocate means, integrate efforts; and ultimately provide a means to measure, report, and correct performance.<sup>14</sup>

2. **Role of Joint Force Staff in Relation to JFC and Components.** “Joint force commanders are provided staffs to assist them in the decision making and execution process. **The staff is an extension of the commander; its sole function is command support, and its only authority is that which is delegated to it by the commander.** A properly trained and directed staff will free the commander to devote more attention to directing subordinate commanders and maintaining a picture of the situation as a whole.”<sup>15</sup> **“Skilled staffs work within command intent to direct and control units** and resource allocation to support the desired end. They also are alert to spotting enemy or friendly situations that may require changes in command relationships or organization **and advise the commander accordingly.**”<sup>16</sup> Staff members work through the staff channel--“the channel by which commanders interact with staffs. It also describes the channel by which staff officers contact their counterparts at higher, adjacent, and subordinate headquarters. These staff-to-staff contacts are for coordination and cooperation only. Higher headquarters staff officers exercise no independent authority over subordinate headquarters staffs, although staff officers normally honor requests for information.”<sup>17</sup> “A JFC is authorized to organize the staff and assign responsibilities to individual Service members assigned to the staff as deemed necessary to ensure unity of effort and accomplishment of assigned missions.”<sup>18</sup>

3. **Role of J3 in Joint Operations.** “**The Operations Division** assists the commander in the discharge of assigned responsibility for the direction and control of operations, beginning with planning and following through until specific operations are completed. In this capacity, the division **plans, coordinates, and integrates operations.** The flexibility and range of modern forces require close coordination and integration for effective unity of effort. When the joint staff includes a Plans Division (J-5), it also performs the long-range or future planning responsibilities. The J-3 is responsible for the operation of the Joint Operations Center for the joint force commander.”<sup>19</sup> Specifically, **the J-3 may be required to disseminate general targeting guidance, establish a Joint Targeting Coordination Board (JTCB),**<sup>20</sup> plan, coordinate, and integrate joint force C2W operations,<sup>21</sup> and coordinate combat assessment.<sup>22</sup> Furthermore, **“The JFC may delegate authority and assign responsibility for coordinating joint air operations to a staff division (e.g., J-3 Operations), a specific staff officer in a staff division (e.g., J-3 air officer), or to a special staff.”**<sup>23</sup>

4. **Role of Components in Planning and Execution.** Component commanders are expected to orchestrate the activity of their own forces, and they must understand how their own pieces fit into the overall design and best support the JFC’s plans and goals.<sup>24</sup> They accomplish **detailed planning** for the actual use of forces and materiel within their operational areas.<sup>25</sup> Component commanders have the authority and responsibility to conduct operations in accordance with the superior commander’s intent and concept of operations.<sup>26</sup> Specifically, **“within their areas of operations, land and naval force commanders are responsible for the synchronization of maneuver, fires, and interdiction.** Land and naval force commanders designate the target priority, effects, and timing of interdiction operations within their AOs. These priorities, along

with the JFC's theater-wide interdiction priorities, are reflected in the apportionment (air) decision. **The joint force air component commander (JFACC) will use these priorities to plan and execute the theater-wide interdiction effort.**"<sup>27</sup> "Commanders position and adjust fire support coordinating measures consistent with the operational situation and in consultation with superior, subordinate, supporting, and affected commanders."<sup>28</sup>

5. **The Targeting Cycle**. Targeting is the process of selecting targets and matching the appropriate response to them. It takes into account strategic and operational requirements and capabilities and the threat to friendly forces imposed by the adversary. Targeting occurs at all levels of command within a joint force and is performed at all levels by forces capable of attacking targets with both lethal and nonlethal disruptive and destructive means. Targeting is complicated by the requirement to deconflict duplicative targeting by different forces or different echelons within the same force and to synchronize the attack of those targets with other components of the joint force. . . . This joint targeting process should integrate capabilities and efforts of national, unified, joint force, and component commands, all of which possess varying capabilities and different requirements. The process is the same in war and MOOTW."<sup>29</sup> The process known as the targeting cycle has six phases: commanders objectives and guidance, target development, weaponeering assessment, force application, execution planning/force application, and combat assessment.<sup>30</sup>

"a. **NCA/Commander's Guidance and Objectives**. Guidance and objectives from the NCA, as well as joint force and component commanders, serve to initiate the targeting cycle. Objectives and guidance also drive targeting priorities, establish restrictions for force employment, drive intelligence requirements, and provide criteria to measure objective attainment.

b. **Target Development**. This phase focuses on knowing the adversary and identifying and nominating critical elements of adversary target systems for attack. The target development phase involves the systematic evaluation of all-source intelligence to identify potential target systems relevant to the commander's guidance and objectives.

c. **Weaponeering Assessment**. In this phase, targeting personnel quantify the expected results of lethal and nonlethal weapons employment against prioritized targets.

d. **Force Application**. Force application integrates the results of earlier phases with operations planning data. Force application is conducted at the command, component, and unit level to fuse target, weapon system, and munitions and nonlethal force options. The JFC is provided fused target intelligence and weapon system recommendations against a target system and its vulnerabilities.

e. **Execution Planning and Force Execution**. Following the commander's approval of force application recommendations, this next phase involves final tasking order preparation and transmission and specific mission planning and material preparation at the unit level.

f. Combat Assessment. CA is the determination of the overall effectiveness of force employment during military operations. Battle damage assessment (BDA) is one of the principal subordinate elements of CA.”<sup>31</sup>

## 6. Role of Various Agents in the Targeting Cycle

a. JFC and Staff. **“Targeting is a cyclical process, . . . which begins with guidance and priorities issued by the JFC.”**<sup>32</sup> “The JFC’s guidance and objectives will identify targeting priorities, joint target list (JTL)/JIPTL planning guidance, procedures, appropriate maneuver and movement control, joint fire support coordinating measures, rules of engagement (ROE), and what defines component direct support sorties. This guidance will also include the JFC’s air apportionment decision.”<sup>33</sup> Since targeting is cyclical, the JFC must review combat assessments and review and revise, if necessary, targeting guidance, priorities, and objectives. The JFC’s joint intelligence center normally develops and maintains the JTL which contains prioritized target categories (command and control, airfields, lines of communications, and others as appropriate). The JTL also contains a sufficient level of detail to assist complete target identification, location, and assessment.<sup>34</sup> “Normally, the joint force J-3 will be responsible for coordinating CA, assisted by the joint force J-2.”<sup>35</sup> “The JFC may establish and task an organization within the JFC staff to accomplish . . . broad targeting oversight functions or may delegate the responsibility to a subordinate commander (e.g., JFACC). . . . Typically, the JFC organizes a Joint Targeting Coordination Board (JTCB). . . . The JFC defines the role of the JTCB.”<sup>36</sup>

b. JTCB. **“If the JFC so designates, a JTCB may be an integrating center to accomplish the broad targeting oversight functions, or a JFC-level review mechanism.** In either case, it needs to be a joint activity comprised of representatives from the staff, all components, and if required, their subordinate units. . . . **Typically, the JTCB reviews targeting information, develops targeting guidance and priorities, and may prepare and refine joint target lists.** The JTCB also must maintain a complete list of restricted targets and areas where special operations forces are operating to avoid endangering current or future operations. The JTCB may assist the JFC in developing or revising the targeting guidance and/or priorities. The JTCB maintains a macro-level view of the AOR/JOA and ensures targeting nominations are consistent with the JFC’s campaign plan.”<sup>37</sup>

c. Components. **“Joint force components identify requirements, nominate targets that are outside their AOs or exceed the capabilities of organic and supporting assets (based on the JFC’s air apportionment decision), and conduct execution planning . . . - components plan and execute assigned missions.”**<sup>38</sup> “Components’ targeting requirements to support their assigned missions are provided to the JFC and JFACC via the target information report (TGTINFOREP). . . . All component commanders within the joint force should have a basic understanding of each component’s mission and general concept of operations/scheme of maneuver to support the JFC’s campaign. Therefore, components should provide the JFACC a description of their direct support plan through the liaison elements within the JAOC. This basic understanding will allow for coordination and

deconfliction of targeting efforts between each component and within the JFC staff and agencies.”<sup>39</sup>

d. JFACC. **“The JFC will normally delegate the authority to conduct execution planning , coordination , and deconfliction associated with joint air targeting to the JFACC/JFC staff and will ensure that this process is a joint effort.** The JFACC/JFC staff must possess a sufficient C2 infrastructure, adequate facilities, and ready availability of joint planning expertise. A targeting mechanism, tasked with detailed planning, weaponeering, and execution, is also required . . . to facilitate the process.”<sup>40</sup>

**Synchronization, integration, deconfliction, allocation of air capabilities/forces, and matching appropriate weapons against target vulnerabilities are essential targeting functions for the JFACC.”**<sup>41</sup> Specifically, the JFACC consults with other components and recommends an air apportionment which, when approved by the JFC, is used to allocate and develop targeting guidance into the joint ATO. The JFACC must continually coordinate with the other components to prioritize and deconflict targets, and synchronize JFACC’s targeting/air operations with the other components’ missions.<sup>42</sup> It is implied through the ATO development process the JFACC develops the joint integrated prioritized target list (JIPTL).<sup>43</sup>

e. Liaison Organizations. **The joint force components provide liaison teams to the JFACC.** These teams include the ARFORs battlefield coordination element (BCE) now called battlefield coordination detachment (BCD), JFSOCC’s special operations liaison element (SOLE), naval and amphibious liaison element (NALE), air force liaison element (AFLE), USSTRATCOM’s strategic liaison team (STRATLAT), and USSPACECOM’s space liaison officer (SLO).<sup>44</sup> These liaison elements consist of experienced warfare specialists who provide component planning and tasking expertise and coordination capabilities. **These experts help integrate and coordinate their component’s participation in joint air operations (e.g., special operations forces (SOF)) and coordinate and deconflict component direct support air operations with joint air operations.**<sup>45</sup> For example, the BCE “is the senior Army airspace command and control (A2C2) element. . . . Preplanned requests for CAS are forwarded through Army command channels to the BCE.”<sup>46</sup> “The BCE consists of intelligence and operations personnel organized into airlift, air defense, fire support, and airspace control elements.”<sup>47</sup> It is implied that these elements assist the JFACC during target development and weaponeering.

7. The link between Maneuver, Interdiction, and Fires. Approved joint doctrine has established that maneuver, interdiction, and fires are complementary.

a. **“Maneuver is the movement of forces in relation to the enemy to secure or retain positional advantage,** usually in order to deliver--or threaten delivery of--the direct and indirect fires of the maneuvering force.”<sup>48</sup> “There are multiple ways to attain positional advantage. A naval expeditionary force with airpower, cruise missile firepower, and amphibious assault capability, within operational reach of enemy centers of gravity, has positional advantage. Land force attack aviation, if able to strike at the opponent’s centers of gravity, also has positional advantage. Maintaining dimensional superiority contributes to

positional advantage by facilitating freedom of action. Maneuver of forces relative to enemy centers of gravity can be key to the JFC's campaign or major operation. Maneuver is the means of concentrating forces at decisive points to achieve surprise, psychological shock, and physical momentum. Maneuver may also exploit the effects of massed and/or precision firepower or WMD."<sup>49</sup>

b. **"Interdiction** is a powerful tool for JFCs. Interdiction diverts, disrupts, delays, or destroys the enemy's surface military potential before it can be used effectively against friendly forces. Interdiction-capable forces include land- and sea-based fighter and attack aircraft and bombers; ships and submarines; conventional airborne, air assault, or other ground maneuver forces; SOF; amphibious raid forces; surface-to-surface, subsurface-to-surface, and air-to-surface missiles, rockets, munitions, and mines; artillery and naval gunfire; attack helicopters; EW systems; antisatellite weapons; and space-based satellite systems or sensors."<sup>50</sup>

c. The terms **"fire"** or **"fires"** (undefined) are mentioned over 350 times in joint doctrine. **"Joint fire support** includes those fires that assist land and amphibious forces to maneuver and control territory, populations, and key waters. Joint fire support can include the lethal or destructive operations of close air support (by both fixed- and rotary-wing aircraft), naval gunfire, artillery, mortars, rockets, and missiles, as well as nonlethal or disruptive operations such as EW."<sup>51</sup>

d. Numerous joint doctrine passages support the link between maneuver, interdiction, and fires. For example:

(1) "The synergy achieved by integrating and synchronizing interdiction and maneuver assists commanders in optimizing leverage at the operational level. . . . **For the joint force campaign level, JFCs synchronize maneuver and interdiction** . . . . Indeed, JFCs may employ a scheme of maneuver that enhances interdiction operations or vice versa. For instance, actual or threatened maneuver can force an enemy to respond by attempting rapid maneuver or resupply. These reactions can provide excellent and vulnerable targets for interdiction."<sup>52</sup>

(2) Within their AOs, **"land and naval operational force commanders are designated the supported commander and are responsible for the synchronization of maneuver, fires, and interdiction.** To facilitate this synchronization, such commanders designate the target priority, effects, and timing of interdiction operations within their AOs."<sup>53</sup>

(3) "CAS operations must be fully integrated into the supported commander's scheme of maneuver and fire support plan."<sup>54</sup>

(4) "The maneuver force commander also may employ CAS to support operations deep within the area of operation, which may include special operations forces or conventional forces with a deep operation mission."<sup>55</sup>



(5) “Deception, special operations, manipulation of the electromagnetic spectrum, direct attack of enemy strategic centers of gravity, interdiction, and maneuver all converge to confuse, demoralize, and destroy the opponent.”<sup>56</sup>

(6) “Interdiction operations can be conducted by many elements of the joint force and can have tactical, operational, and strategic effects. Air, land, sea, space, and special operations forces can conduct interdiction operations as part of their larger or overall mission. For example, naval expeditionary forces charged with seizing and securing a lodgment along a coast may include the interdiction of opposing air, land, and naval forces as part of the overall amphibious plan.”<sup>57</sup>

(7) “The plan of attack provides for the employment of various elements of the landing force. It consists of the scheme of maneuver, the landing plan, and the plan of supporting fires. . . . Fire support has a major effect on the development of the plan of attack. Until artillery is landed, gunfire support ships and aircraft furnish both preparatory fires and fires in close support of the attack.”<sup>58</sup>

(8) “The concept for maneuver, both naval and land, needs to be articulated in the JFC's concept of operations (and should include) timing, sequencing, and method and location of entry into the operational area. Types of joint force maneuvers include forcible entry, sustained action at sea and from the sea, and sustained action on land. . . . Forcible entry usually requires support from naval gunfire and/or aviation assets.”<sup>59</sup>

(9) “A successful C2W effort will contribute to the security of friendly forces, bring the adversary to battle (if appropriate) at a disadvantage, help seize and maintain the initiative, enhance freedom of maneuver, contribute to surprise, isolate adversary forces from their leadership, and create opportunities for a systematic exploitation of adversary vulnerabilities.”<sup>60</sup>

## SECTION B: DOCUMENTED JOINT FIRES FUNCTIONS/TASKS

1. **Universal Joint Task List (UJTL).** UJTL tasks are actions or processes performed as part of joint operations. The UJTL indicates from the strategic national and theater levels down through the operational and tactical levels that employment of firepower is a major operating task. As an illustration, **OP 3 Employ Operational Firepower is “To employ lethal and nonlethal means to defeat enemy forces or to maintain freedom of movement. Operational firepower is, by its nature, primarily a joint/multinational task.** Firepower refers to the delivery of all types of ordnance to include bombs, rockets, missiles, and artillery, as well as other nonlethal means against enemy targets at operational depths.”<sup>61</sup> A summary of pertinent tasks is provided below and a complete description of each task is provided in Appendix C.

- a. Related Tasks. Significant related tasks are conducting operations in depth, collecting information, assessing the situation, preparing plans/orders, synchronizing/integrating operations, and employing operational information warfare (IW).
- b. Subordinate Tasks. Regarding targeting, the UJTL outlines several subordinate tasks at the operational level such as: conducting targeting, establishing joint force targeting guidance, developing targets, assigning firepower means to targets, prioritizing high-payoff and high-value targets (HPT, HVT), publishing tasking orders, conducting combat assessment, and developing fire support coordination measures (FSCM). Regarding attacking targets, the UJTL suggests various lethal and nonlethal attacks, synchronizing firepower, and providing firepower in support of maneuver.<sup>62</sup>

2. **SOPs and Orders**. **The combatant commands and Service force headquarters who may be established as a JTF have developed SOPs, orders, and other documents to provide guidance regarding various joint fires roles, functions, and tasks.** A categorized narrative summary of these items is provided below which was derived from USCENTCOM CCRs 525-1 and 525-24, and CONOPS for TMD; USPACOM JFACC CONOPS; USACOM JTF SOP (Draft); Deep Operations Primer - Korea; XVIII Airborne Corps JTF SOP; and USARCENT JTF HQ SOP. Unofficial, consolidated task-assignment matrixes for the JFC, J-3, JFFC, JFACC, JTCB, and components with references to the above documents are provided in Appendix D.

- a. Perform Staff Estimates, Prepare Plans, and Document Decisions. Joint fires estimates are prepared by the J-3 with the help of the JFFC, if established, or the targeting/fires/battle management cell to aid COA and theater targeting strategy development. The JTCB also may advise the JFC on target prioritization, ROE, and plan to achieve overall aims and objectives. Thereafter, the J-3, assisted by a JFFC or other fires/targeting/battle staff cell members, prepares a joint fires annex/fire support plan which will include initial targeting guidance, objectives, priorities; and guidance on such things as FSCMs. The JFACC or J-3 will recommend initial apportionment guidance based on staff and component estimates. Throughout the operation, the J-3, J-3 member, and/or JTCB will continually review, recommend, and promulgate decisions regarding current joint fires targeting guidance and priorities, apportionment guidance, the JIPTL, JTCB actions, additions/changes to FSCMs, supplemental ROE, and BDA results. Component commanders make recommendations on the proper employment of their capabilities. The JFACC usually develops a master air attack plan (MAAP) and publishes an ATO daily. The J-3 issues fragmentary/attack orders to components executing joint fires or fire support for another component that are not on the ATO.

- b. Establish a JTCB. The JFC typically tasks the J-3 or JFACC to establish, organize, and operate a JTCB. Its purpose is to provide a principal forum for discussion of component targeting requirements and integration of joint fires. The JFC (J-3 assist) defines the role and functions of the JTCB. The JTCB is valuable in coordinating targeting information, developing targeting guidance and priorities, defining the desired effects of joint fires, reviewing targeting lists, and assessing adherence to JFC guidance. It usually is chaired by the Deputy JFC or J-3. The JFFC, if established, a targeting/fires/battlefield management

cell, or the JFACC is tasked with providing administrative and logistical support to the JTCB.

c. Designate a JFACC. The JFC normally will designate a JFACC to coordinate and synchronize joint air operations. The JFACC develops the air apportionment recommendation in consultation with other component commanders. The JFACC also may coordinate and deconflict component targeting requirements, develop a JIPTL, develop a MAAP, develop and publish an ATO, and direct/redirect attack of targets with assets allocated by the JFC. In some theaters, the JFACC operates the JTCB and may be the coordinating authority for all fires beyond the FSCL.

d. Conduct Joint Force Targeting. Targeting actions are conducted at all levels of the joint force. Joint force targeting begins with JFC guidance and continues through the various phases described in joint doctrine.

(1) Provide Targeting Guidance, Objectives, and Priorities. Targeting guidance, objectives, and priorities are to be developed, recommended, approved, documented, and issued. Furthermore, they must be reviewed and refined throughout the joint operation. Overall, the JFC at any level is responsible for providing them and the J-3, JFFC (if assigned), and/or targeting board primarily assist in the effort. Some specific items associated with these tasks are to develop, recommend, review, and approve apportionment of air assets; establish timing and effects for targets - define desired effects of joint fires; and review target nominations to assess/ensure compliance with JFC guidance and/or campaign plan. Note that the development and recommending of air apportionment is usually a JFACC function in consultation with air capable components or J-3 function when a JFACC is not designated. Commanders at all levels establish procedures to manage the targeting function.

(2) Target Development. The development and nomination of lethal and nonlethal targets is conducted by various member of the joint force. The J-2 is tasked to provide targeting intelligence and develop joint target lists which also may include restricted targets. The J-3 works closely with the J2 to coordinate organic collection efforts; integrates space systems support; and may develop and approve the protected target list, and nominate IO, EW, and deception plan targets. The JFFC, when designated, performs the monitoring and reviewing of all target nominations, to include review and promulgation of the JIPTL, along with development of high payoff target list (HPTL) and the no strike/protected target list. Some commands establish targeting/firepower/battle management cells at the headquarters to accomplish specific tasks such as identifying HVT/HPT categories and consolidating JFC, NCA, and special category targets. A JTCB usually is established at the joint force headquarters to review and approve target lists (JTL, JIPTL, RTL) and it even may prepare them. In any case, the JTCB is a forum to coordinate, deconflict, and discuss targeting efforts by all members of the joint force. Some commands operate a JTCB under the JFACC and in those cases the JTCB is a "hands-on" organization in developing and refining the target list. In addition to targeting for organic assets, components identify, prioritize, deconflict, and nominate targets for

attack that exceed their capabilities. NAVFOR and AFFOR may be designated to specifically conduct targeting for Tomahawk land-attack missiles (TLAM) and conventional air-launched cruise missiles (CALCM). Generally, the JFACC is used to consolidate, review, deconflict, and prioritize, targets that cannot be attacked by other components' assets. The outcome is a JIPTL which the JFACC briefs to the JTCB for JFC approval.

(3) **Weaponneering and Force Application.** The actions to determine target attack objectives; develop target description; apportion air assets, recommend the number/type of weapons, delivery platform and aim point; identify target area threats; and develop the probability of destruction are primarily conducted at the component level, specifically the JFACC. The JFACC may recommend or assign targets to TLAMs and CALCMs in coordination with NAVFOR and/or AFFOR. The usual product in a master air attack plan (MAAP) or master attack plan (MAP). The JFFC or firepower/targeting cell, when designated, may be the focal point for JFC level input to recommend, coordinate, synchronize, and allocate joint fires (e.g., surface-to-surface) deep strike weapons, fire support). A JTCB normally does not get involved in the details of these processes, but may be a synchronization body for lethal and nonlethal fires by assessing adherence to JFC guidance and priorities. When the JTCB is designated as an organization to support the JFACC, as in USCENTCOM and Korea, it is involved in these processes. Air capable components provide a description of direct support operations/missions to the JFACC or J-3 when no JFACC is designated.

(4) **Execution Planning and Force Execution.** The JFACC has most of the execution phase effort and responsibility--JFACC must produce the ATO and supervise its execution. In some cases, the production and execution of the integrated tasking order (ITO) (all fires) are JFACC functions. This effort requires a great deal of coordination with other components since TLAMs, ATACMS, and attack helicopter missions can be included on the ATO/ITO and deconfliction with SOF and other operations is imperative. Other components also conduct execution planning and task subordinates to execute specific attack per established guidance. Components must inform the JFACC about attacks beyond the FSCL. The JFFC, if designated, may assist the J-3 in preparing taskings for nonair strikes (e.g., SOF direct action)--the JTCB may initiate the process. The JFFC or targeting/fires cell may also coordinate cross-Service surface-to-surface fire support during execution.

(5) **Combat Assessment.** The JFC through the J-3 directs and integrates the overall combat assessment effort. The J-2 and components assist the J-3 in BDA collection, collation, and dissemination. The JFACC provides BDA, munitions effectiveness assessment, and reattack recommendations to the JFC. Other components recommend BDA priorities. The JTCB usually monitors the evaluation of BDA for the JFC.

e. Synchronize Joint Fires with Maneuver, SOF, IO, Protection, Logistics, etc. The J-3 is charged with planning, organizing, coordinating, integrating, synchronizing, and directing joint operations for the JFC. The documents indicate the J-3 or the JTCB should provide a

campaign assessment, review the plan several days in advance, and advise the JFC to anticipate future operations. Some commands designate cells in the J-3 to provide coordination of theater/JOA operations and anticipate changes in joint fires guidance and priorities. The JFFC or JTCB often is tasked to assess adherence of component targeting plans to JFC guidance and priorities, and to maintain a logistics awareness regarding joint fires. In Korea, a synchronization cell is formed as part of the ACC's combined targeting board to keep ACC targeting linked to the CINC's overall strategy and to interface with the CINC's battlefield coordination working group (BCWG). The JFACC should evaluate results of air operations and provide an evaluation to the JFC regarding the campaign. The J-3's IO cell coordinates its activities with the JTCB, JFACC, and/or JFFC.

f. Coordinate Joint Fire Support. The J-3 or J-3 member(s), such as the JFFC and fires/targeting/battlefield management cell, recommends, reviews, coordinates, and publishes theater/JOA FSCMs. Generally, land force commanders position and adjust their FSCMs in consultation with other commanders and they or the J-3 disseminate the changes well in advance of the effective time. Coordination/synchronization of fires between the FSCL and forward land boundaries or other control measures such as the DBSL in Korea are accomplished by either the land force commander or the JFACC. The coordination of cross Service surface-to-surface fire support can be a JFFC function, along with maintaining a logistic awareness of fire support systems in coordination with the J-4. The JFACC or J-3 determine the need; coordinate; and redirect, divert, and otherwise change attacks in a timely manner.

## SECTION C: LESSONS LEARNED FROM JOINT EXERCISES

1. **JULLS**. Over 300 JULLS entries were reviewed and 28 were determined to be pertinent to this study. Most of the observations, discussions, and lessons learned centered around confusion over the exact roles of the JFC, JFFC (if established), JFACC, and JTCB regarding targeting or joint fires coordination along with establishment of FSCMs and other procedures. **Generally, the selected JULLS entries indirectly support a JFFC concept to assist the JTCB, disseminate targeting and FSCMs data, clarify commanders intent and guidance, integrate IO targeting, and establish SOPs and standards regarding targeting or joint fires coordination etc.** A summary of the major findings is provided below and a complete listing is shown at Appendix E.

a. Operation DESERT SHIELD/STORM. Among many lessons learned, the participants emphasized the importance of establishing anti-fratricide procedures, including a clear definition of and compliance with the FSCL. Other terms like "restricted fire area (RFA)," "no fire area (NFA)," and "boundary" became issues because of different interpretations from the Army and Marines. Coalition warfare demanded the BCE aggressively seek information to coordinate targeting. Confusion over interdiction responsibilities prompted a suggestion that the CINC must address and define them during campaign planning. This operation was very important in influencing the establishment of the JFC's role in targeting, which included designating a JFACC and assigning his responsibilities, issuing fire support guidance, and approving the prioritized attack of targets.

- b. Operation PROVIDE COMFORT. Two JULLS entries indicated the CJTF did not have a means to coordinate British, USMC, and USA artillery, mortars, and attack helicopters with USAF and USN air assets. This prompted recommendations to establish a fire support element at the JTF level. This recommendation was also given after exercise FUERTES DEFENSAS 93.
- c. Operation UPHOLD DEMOCRACY. A JFFC was used for this operation and one JULLS entry indicated the importance of the JFFC's role in establishing FSCMs procedures and in coordination and dissemination of component FSCMs throughout the joint force.
- d. Exercises OCEAN VENTURE 92. Apparently a JFFC of sorts was used and there was confusion regarding the targeting functions of the JFACC, JTCB, and JFFC.
- e. Exercise COBRA GOLD 92 and 93. During CG 92, the JTCB was used to develop a prioritized target list and the JULLS entry indicated the meeting took about 3 hours so an established agenda was critical to success. A JULLS entry from CG 93 indicated the JTCB needed to be organized and manned adequately to complete the administrative and targeting review tasks. It suggested the JTCB have three cells: target review, administrative, and apportionment and guidance, which would require about 10-12 personnel.
- f. Exercises TANDEM THRUST 92 and 93. As with the CG exercises, the JULLS entries concentrated on the JTCB. They suggested a publishing a detailed JTCB SOP to include procedures, inputs examples, timelines, and coordination requirements/procedures with JFACC, BCE, FSC, TLAM planners/targeteers; and joint planning, intelligence, and current operations cells. It was emphasized that the JTCB must focus on enemy centers of gravity and provide clear recommendations to the CJTF.
- g. Exercise TEMPO BRAVE 94. To avoid long JTCB meeting to deconflict component target lists it was suggested the JTCB publish categories of targets approved for attack vice individual targets and restrictions on individual targets or target categories could be updated every 6 hours or by exception. Duplication in the components' nominated targets was created when initial targeting guidance was not disseminated early enough.
- h. Exercise AGILE PROVIDER 94
  - (1) A JFFC was used during the exercise. Lesson learned indicated problems with understanding the JFFC concept and function regarding the targeting process. However, the members of the joint guidance, apportionment, and targeting (JGAT) cell developed an appreciation for the JFFC's ability to bridge the JTF commander's intent and guidance into targeting guidance that focused the participants' efforts in developing the JIPTL. Coordination of "pop-up" air targets and those across AO boundaries were coordinated by JFACC members. It was learned that Go/No-Go criterion for components is a JTF interest and therefore associated targets must be highlighted by the CJTF.

(2) The importance of designating a common grid system to eliminate confusion regarding FSCMs was discovered.

(3) TLAM release authority relationships between the CJTF and the JFACC became an issue and the lesson learned was to establish them at the beginning of an exercise/operation, to include ATO preplanned launches, alert launches, and emergent launches.

i. Exercise COBRA GOLD 94. The importance of establishing the purpose, definition, and use of the FSCMs was again emphasized. Additionally, one JULLS entry noted that users of raw BDA must be identified before an operation, and procedures must be established to ensure dissemination to them.

j. Exercise TANDEM THRUST 95. One item indicated that in a small conflict, the JFACC may be the best JFFC since there may be adequate air to cover all the targets and no need to use a JTCB.

k. Exercise UNIFIED ENDEAVOR 95. A JFFC also was used and two entries indicate the IO cell members frequently coordinated with the JFFC, JFACC, JTCB, and others to satisfy their target list needs.

2. UE 96-2 and 97-1. The study team conducted interviews, observed joint fires coordination actions (JTCB meetings), and reviewed observer training inputs during UE 97-1 from 12-18 December 1996. In addition, the OT inputs from UE 96-2 were reviewed. **Both exercises used a JFFC, JTCB, and JFACC to perform joint fires functions.** A summary of the significant raw data is provided below.

a. UE 97-1 Interviews

(1) JFFC Need. The interviewees felt the fires coordination function must be performed by someone, preferably a JFFC, although it has been performed by the JFACC in situations like Korea. **They indicated the JFC needed a JFFC to be the impartial arbiter for joint fires, manage scarce resources, ensure the commander's guidance is being followed and intent accomplished, maintain a focus on what to preserve or destroy, deconflict lethal and nonlethal fires, champion JFC fires needs, and help the JFC maintain situational awareness.** Many pointed out that components tend to focus on executing their own plan without realizing they are going astray from JFC's intent. Without a JFFC, there is deconfliction which is not synchronization. Some indicated the utility is using a JFFC as a strategy synchronization interface which is larger than fires. The UE 97-1 JFFC noted that without a JFFC, the HQ would not have known what was going on, and JFACC would have done interdiction with no regard to what other support was required. The JFFC at least reminded some of what the JTF was trying to do.

(2) JFFC Position and Role. All interviewees either assumed or suggested the JFFC should work for the J-3 as a special staff officer and advisor--like the lawyer does for ROE. The JFFC should have no command, execute, or directive authority, and no C2 over weapons systems. JFFC should not be a JFACC competitor. **Overall they saw the JFFC as a planner and execution monitor whose focus should be in future fires planning across the whole JOA.** As such, the JFFC must understand what each component brings to the fight in terms of weapons capabilities and should be able to articulate how joint fires will be used and synchronized to accomplish the joint force objectives. The JFFC should not be a fire support coordinator during execution, but an integral part of emerging/nonplanned targets who helps with synchronization (e.g., ATACMS vs. air mission), apportionment (e.g., use other weapon system vice CAS), and tasking for systems other than air. Overall, some feel the JFFC functions need to migrate toward future operations and synchronization of maneuver and interdiction. Some suggested duties include the following:

- (a) Assist the JFC and components in putting the overall fires plan together
- (b) Provide fires recommendations to J3.
- (c) Ensure the whole fires picture is understood
- (d) Assist the JTCB--another voice for resolution

(3) During the Phases of an Operation. Interviewees felt the JFFC would be very active in the early phases of an operation. The UE 97-1 JFFC believed that during CAP, the JFFC is in J-3's hip pocket, thinking about all fires to support maneuver--SME on fires. "The JFFC's recommendation leads to a decision that causes things to happen on the TPFDD and has a role in each phase of the operation." One felt there is a need for a JTF fires coordinator early on for consistency and need for a target list early on--set up a JFFC in prehostilities. Another noted **the JFC's intent changes over the phases--JFFC assists in formulating and disseminating those changes (e.g., apportionment).** During combat operations, the JFACC is looking at air operations and JFFC is an advisor on all fires; therefore, JFACC has a much narrower focus. During certain MOOTW (e.g., permissive noncombatant evacuation operation (NEO)), the JFC may not need a JFFC, just PSYOP/JSOTF; or the JFC may have an all airlift ATO with no lethal fires, and also may not need a JFACC

(4) During the Targeting Cycle. Several interviewees noted the following items:

- (a) The JFFC plans officer influences action in the joint planning group (JPG) which influences J-3 decisions relating to the targeting cycle. **The JFFC targeting cell helps JIC pick targets and obtains assessment results.** From the JTL, a high value target list (HVTL)/target sets are developed from which the JFFC chooses HPTs and causes a HPTL to be developed and transmitted to the components.



- (b) **The JFFC attempts to synchronize fires and maneuver, by looking at the entire JOA; not just close battle.** The JFFC is focused on operational/strategic goals while components are focused on operational/tactical levels. Timing is decided based on a JPG decision. The JFACC finds the target, weaponeers, and executes.
- (5) JFFC Products. Some interviewees provided a list of potential **JFFC products** which is summarized below.
- (a) Fires Estimate. This goes into great detail about weather, weapons, impacts of fires, and analysis of COAs from fires effectiveness standpoint (e.g., max use of fires- minimum use of people; COA conditions such as like feasible, acceptable, suitable, complete, etc.); and makes recommendations.
  - (b) Commander's fires guidance and intent for next 24-96 hours.
  - (c) JIPTL review.
  - (d) Targeting Bulletin (TARBUL) message which contains decisions of the JTCB, allocation of assets, targeting guidance, additions to the JTL, new additions to the restricted target list, other special instructions, and all FSCMs.
- (6) Duplication of Effort. **Some interviewees felt the JFFC functions could be duplicative of those for the JFACC or JTCB if not clearly defined - especially regarding the JIPTL.**
- (a) One interviewee with JFFC experience noted the JFFC's 0700 targeting meeting, which is a JTF level JIPTL development session, is already done at the JFACC's GAT. This former JFFC noted the GAT starts with JFC objectives in the strategy model, then takes target nominations that components cannot service based on their tasks. GAT members "rack and stack" targets and out of that derive target categories and analysis of targets for vital centers. Ultimately the JFACC matches tasks with targets which are significant (lots of discussion and give and take). **The JFACC must ensure a target traces to a task which traces to a JFC objective.**
  - (b) **The UE 97-1 JFFC noted that because the JIPTL was improperly prioritized to reflect JFC's and components' priorities, it should be developed by the JFFC cell.** "It is grossly inefficient for the JFACC's GAT to formulate it twice when JFFC sends it back for revision." Another interviewee pointed out the JFACC has no visibility on some EW, PSYOP, and IO concerns, but does have visibility on ATACMS, TLAMs, etc. The SOLE plots RFA for JFACC.
- (7) JFFC Organization. **Some interviewees noted the JFFC is more than one person and needs staffing to be effective and credible.** Otherwise, JFFC is reduced to being an

administrative assistant to the JTCB. One suggested the JFFC should be on the order of a J35 and the makeup of the cell should be joint, have IO perspective, use J3/JOC C4I capabilities, and include intelligence people. The UE 97-1 JFFC explained that the XVIII ABC T/O is a 21 person staff (plans, ops, targeting sections) and felt it needs to number around 30 for 24 hr/day ops.

(8) JFFC Title. Some interviewees were asked if the JFFC title is misleading. **One noted the JFFC is a coordinator in the broadest sense if you consider planning functions and information gathering during operations.** Also, the JFFC's targeting officers go to the JIC to coordinate. Perhaps "joint fires staff officer" would describe the position better. Another interviewee said the function needs to be called the joint strategy or maneuver synchronization cell.

(9) Doctrine Shortfalls. The senior mentors noted there are shortfalls in understanding the JFFC role. They usually have seen confusion among exercise participants about the JFFC's role. For example, the JFFC is seen as staff for the JTCB, but the JFFC's purpose is more important than that. They noted there is a need for JFFC doctrine to establish some appreciation for what the JFFC brings to the fight--a common ground with equipment, training, and personnel. One mentor noted JFFC training is needed as done during the genesis of the JFACC concept. **"The joint community needs to grow and develop the joint force fires process and teach it."**

b. Study Team Observations

(1) **The JFFC and cell was tasked as the administrative agent for the JTCB.** As such, the JFFC developed the agenda, collected and collated presentation materials, and advised the Deputy CJTF who served as chairman of the JTCB.

(2) **The JFACC's GAT developed the JIPTL.** However, the JIPTL was to be reviewed and recommended for CJTF approval by the JTCB. As support for the JTCB, the JFFC attempted to obtain the JIPTL on a daily basis in a timely manner for JFFC cell review for compliance with JFC guidance and pre-review by other JTCB members. Time available or information flow problems precluded JFFC effectiveness in this area.

(3) During the operation, it became apparent to the JTCB chairman that the JIPTL and lethal ATO did not support a forcible entry operation, which produced a flurry of 11th hour planning and changes. This situation illustrates how the JFFC could be useful by ensuring the fires effort is coordinated with other "maneuver" efforts through effective coordination with the JPG, J-3, and JFACC. It also illustrates the potential value added of the JTCB and JFFC vice just having a JFACC/GAT. Components normally are not aware of overall joint planning activities in a timely manner nor sensitive to the operational flexibility required to impose the friendly will on the enemy. Their awareness of the campaign intricacies can only be heightened by JTCB reviews and efforts of a joint force staff which ensures the commanders intent and synchronization are accomplished.

**Deconfliction and synchronization of targets alone does not fulfill the synchronization responsibilities of the JFC.**

(4) The JFFC's fires targeting cell did a scrub on JIPTL X and JIPTL Y and the JFFC recommended transition directly to ATO Y as the best way to transition from ATO X to new X guidance. The JTCB chairman asked if JFACC agreed with the assessment. This illustrates how **the JFFC can be doing JFFC business, while also getting in the JFACC's business.**

**(5) The JFFC is key in translating the JFC intent into clear, understandable, and workable targeting guidance and priorities.**

(6) Given a lack of JFFC cell manning and experience, no substantive training, and limited C4 systems support; the cell can get bogged down trying to establish a viable role and end up resolving current operations/administrative issues rather than maintaining a "big picture" focus on joint fires and the campaign/operation.

**(7) The JFFC demonstrates "value added" by intervening when components are not clear on guidance or not following the guidance and by developing clear, detailed targeting guidance and priorities.** For example, in UE 97-1 the JFACC did not plan to use TLAMs/CALCMs until the JFFC clarified the difference between "planning to use" and "release authority" in a JTCB meeting.

(8) The JFFC coordinated with the IO cell, JIC, JOC, JPG, BCD chief (0-6), component liaisons, and directly with component fires experts.

(9) The joint fires appendix, (Appendix 16) to Annex C, focused on the commander's concept of fires and priorities through all phases of the operation, fire coordination methods/request procedures, and flow of JIPTL nominations (JFACC with copy to JFFC).

c. Observer/Trainer (OT) Observations. During UE 96-2 and UE 97-1, OTs were used by USACOM to monitor joint fires activities. The following is a very brief synopsis of pertinent observations.

**(1) The UE 96-2 DCJTF viewed the JFFC role as:**

(a) Coordinator and synchronizer of all JTF fires and author of the "Fires" Annex of the OPOD.

(b) Executive agent for the JTCB.

(c) Assistant to the JTCB in formulation of draft targeting guidance to be passed down to the components.

(d) CJTF link to the JFACC GAT to ensure the targeting guidance is followed when formulating the JIPTL

(e) JIPTL examiner and primary agent to discuss any problems with the J3/DCJTF prior to the JTCB meeting.

The DCJTF noted the JTCB is not in business to formulate the JIPTL.

**(2) The UE 96-2 JFFC saw his cell as having three possibilities:**

(a) **A large cell which does all targeting and analysis of systems for the entire joint force**, then passes this information down to the components. This is the least desirable because of the cell size and this task already is being accomplished by the components (mainly JFACC).

(b) **A medium cell of about 10 to 12 personnel per shift. Each would be mission area experts who would look for the best way to use all types of force (lethal/nonlethal) to accomplish the CJTF's objectives.** Their plan would be briefed at the JTCB as guidance to be approved. They would be looking at the JIPTL to make sure the guidance has been followed and to alert the JTCB of potential problems. This cell also would have a spot in the JOC for emerging problems and be "in place" to coordinate the "fires" solution.

(c) **A small cell of 5 personnel to look at the overall "fires strategy" and help the JTCB with guidance and objectives to be passed to the components.** They would be looking at the JIPTL to make sure the guidance was followed in a macro sense, but not in the detail of option 2. The JFFC would also be the JTCB executive agent as in option 2.

**(3) The JFFC must be active early in the planning process** with the JPG in formulating COA estimates, etc.--a one-man show is inadequate. A potential JFFC product is input to synchronization and decision support matrixes. The JFFC must coordinate with numerous staff and component members to produce the "Fires" appendix to the OPORD. **CJTF's guidance is critical to synchronization. If guidance is flawed, targeting and air support suffer.**

**(4) The JFFC possibly could have a role in PSYOP integration** in the fires picture. The JFFC needs to be aware of PSYOP plans and PSYOP pertinence to the JTF plan.

**(5) The JFFC could have a role in "cross-walking" component plans and JIPTL prioritization issues before it is too late to correct errors.** The J-3, through the JFFC, must ensure the ATO/targeting process embraces all participants and works to resolve differences before the JIPTL becomes a MAAP and ATO. The JFFC cell needs to analyze targeting impact on JTF objectives.

(6) **The JFFC cell needs to be involved in more than just targeting** (e.g., supporting fires for SOF teams if compromised). The JFFC cell must remember they are more than air assets (JFACC) available, i.e., naval gunfire, MLRS, attack aviation, other SOF assets, and TLAM etc., to provide fire support to inserted SOF forces. The JFFC cell must address ATACMS, TLAMs, CALCMs, and nonlethal fires as well as air power. The JFFC cell needs to review/validate components' inputs to the JTCB and keep these inputs on track during the JTCB meeting.

(7) **The JFFC cell needs to be proactive to coordinate joint fires and anticipate issues.** The JFFC cell should discuss the issues with components before these issues become problems for the JTF. The JFFC cell should not be concerned solely with preparing JTCB slides. (Example: How will fire support be provided to compromised SOF teams?) Also, there was a lack of initiative in nonlethal fires--the JFFC cell was content to learn of nonlethal fires from the components instead of working them into the JTF fires plan.

(8) The JFFC focused on airpower/TLAMs, preparation for the JTCB meeting, production of the TARBUL, and maintenance of JTF-level FSCMs. **The JFFC must remain focused on coordinating lethal and nonlethal fires** and not get distracted by airspace issues, JTCB matters, etc.

(9) **Information flow to the JFFC is key** (obtaining component plans for review, understanding the JFC's strategy). Without information, the JFFC is unable to make judgments and recommendations. The JFFC could be a player in fires information flow issues, i.e., what do I, we, others know and who else needs to know it.

(10) The JFFC concept, responsibilities, relationships with others, and cell manning are not established and clear to all concerned. **There is a need for joint doctrine on the JFFC to support theater use/development of theater SOPs.** The JFFC cannot monitor the current JTF deep operations without a system to support the function.

(11) **The JFFC has to be careful not to duplicate JFACC capabilities.** The JFFC may harm excellent JFACC plans through the JTCB process due to incomplete information. JFFC briefs can actually introduce confusion (e.g., which ATO is in effect?).

## **SECTION D: POSITION PAPERS & OTHER INTERVIEWS AND LITERATURE**

1. **Position Papers.** Responses to the study team's request for information (JWFC msg 021700ZDEC96) were submitted by some commands and reviewed. A summary is provided below.

- a. **USEUCOM.** The command believes the Joint Force Fires Coordinator, if established, should be a JFC staff function under the JFC's J3. Within the context of

the campaign plan, the planning and synchronization of all “fires” under the purview of the JFC is a key responsibility of the JFC. The execution (to include “execution planning”) of those fires is a key function of the individual components, within the context of component OPLANs/OPORDs. This functional distinction between fires planning/synchronization at the JFC’s level and fires execution at the component level is important. Currently, the components have the appropriate staff resources to conduct fires execution planning (AOC within the JFACC, FSCoord within land component headquarters, etc.). To date, a staff planning/synchronization structure within the JFC’s J3/J5 has not been described in joint doctrine.<sup>63</sup>

b. MARFORPAC. This command believes the JFFC concept has merit by providing the J-3 recommendations needed to accomplish the full range of joint fires planning and synchronization requirements in sustained combat operations. The JFFC provides the J-3 and JFC the means to oversee and monitor all joint fires and provides a focus on target priorities and asset allocation throughout the joint force. MARFORPAC envisions the JFFC functions as follows:

- (1) Provide a joint force focal point for integration and synchronization of targeting guidance, fires planning, and staff efforts to meet the joint force fires requirements.
- (2) Advise the J-3 on the use of fires.
- (3) Monitor critical targeting information.
- (4) Develop staff estimates and OPLAN annexes.
- (5) Provide recommendations during COA development.
- (6) Provide administrative support to the JTCB.<sup>64</sup>

c. TRADOC. TRADOC supports having a JFFC as an option in joint doctrine which could include a supporting staff. TRADOC feels the JFFC, after coordinating with the components, would provide recommendations to the J3 to accomplish the full range of planning and synchronization requirements for joint fires in sustained combat operations. TRADOC senses the following advantages:

- (1) The position provides a central staff focal point for integrating and synchronizing targeting guidance, fires planning, and staff efforts in meeting the joint force fires requirements. This central point does not currently exist on the JFC’s staff.
- (2) The position fills a void by providing an individual to advise the J-3 on fires. The JFFC serves as the focal point for joint force staff input to targeting, fire planning, and synchronizing joint force fires.

(3) The JFFC monitors critical targeting information and is the manager of the joint targeting function. As such, the JFFC monitors the targeting efforts for ALL targets, not just air targets, which are the JFACC's focus.

(4) The JFFC fulfills a planning void by developing plans for employing joint fire assets within the JOA.

(5) The JFFC resolves, reviews, and coordinates FSCMs with the joint force staff and components to support the JFC's concept of operations.

(6) The JFFC serves as the executive agent for the JTCB. If adequately staffed, the JFFC cell can provide administrative support.

(7) The JFFC is an optional staff position. The JFC is not required to employ a JFFC if he feels the situation does not warrant one. The doctrinal basis for the position allows a framework to be in place with guidelines for JFFC functions. It is simply another tool in the joint force commander's "kit bag."<sup>65</sup>

d. Air Force Doctrine Center (AFDC). The AFDC released a message which responded to the study team's request for information. Their observations of the JFFC are based on excerpts from USACOM's JTF SOP and XVIII Airborne Corps' JTF SOP, and observations from Exercises AGILE PROVIDER 94, JOINT TASK FORCE 95, UE 95, UE 96.2, and UE 97-1. A synopsis of their remarks is provided below.

(1) **Most of the duties in the SOPs are done by the JFACC.** The JFACC has a joint staff and the assets to effectively carry out these tasks. As observed in several exercises, the JFFC does not have the capability (manpower or technical support) to accomplish what is spelled out in the SOPs.

(2) **The JFFC does not have the manpower or equipment to do assigned tasks,** the JFACC does this with little or no value added from the JFFC.

(3) JFFC support to the JTCB causes the JTCB to become a micro manager instead of viewing targeting at the macro level as joint doctrine intends.

(4) The JFFC-assigned function of coordinating cross-Service surface-to-surface fire support already is done by the joint air operations center (JAOC).

(5) **Observations during AGILE PROVIDER 94 indicate little or no value added by the JFFC and duties were already being performed by the JAOC.** The JFFC's duties during JTF 95 also were redundant to JFACC's duties.

(6) During UE 95, the JFFC became a JFACC watchdog, which is unnecessary and not done for other components. During UE 96-2, the JFFC only facilitated JTCB meetings,

which was unnecessary. During UE 97-1, air power was not efficiently or effectively used due to the constraints placed upon the JFACC by the JFFC. In addition, tasking levied on the JFACC staff by the JFFC added time to the ATO cycle.

**(7) In summary, the JFFC duties already are performed by the JFACC and other agencies, the JFFC (normally a FSCOORD) cannot provide accurate advice to the JFC on the use of air power, and JFFC tasks squeeze time from the ATO cycle.<sup>66</sup>**

e. HQDA. The Army staff briefed members of the Joint Warfighters Conference in December 1996 on the following points:

**(1) The JFFC is the JFC's option to augment the J-3 as a special staff officer, principal joint force fires advisor, and focal point for joint force staff input to targeting, fire planning, and synchronizing joint force fires.**

(2) Some critical tasks of the JFFC are as follows:

(a) Develop plans for employing joint fires assets within the JOA.

(b) Resolve, review, and coordinate FSCMs with the joint force staff and components to support the JFC's concept of operations.

(c) Monitor all high priority targeting efforts, to include No Strike List/Protected Target List.

(d) Serve as the executive agent for the JTCB meeting preparation and support.<sup>67</sup>

f. Army-Air Force Warfighter Conference. The 4-5 December 1996 Army-Air Force Warfighter Conference agreements were outlined in a joint message shown in Appendix F. Key items associated with Joint Pub 3-09 are described below:

**(1) Change the name of the joint force fire coordinator (JFFC) so it does not connote any command function and would be an option primarily for JTFs.**

(2) Elements of the fires hierarchy should be defined in terms of "effects" rather than specific platforms.

(3) In the deliberate planning process, all targets for joint fires will be coordinated to the maximum extent possible.

(4) All targets forward of the FSCL and inside the GCC's area of operations will be coordinated with all affected commanders to the maximum extent possible. If not practical because of time sensitivity, emergency or exceptional circumstances, then all



affected commanders will be informed with the commander executing the mission accepting the operational risk.

2. **Other Interviews.** Two former JFFCs were informally interviewed regarding their lessons learned. One had been the JFFC for operation UPHOLD DEMOCRACY and the other during a joint exercise. **Both felt it was important for the JFFC and cell to manage the development of the JIPTL to ensure the overall targeting effort supports the CJTF.** However, in a DESERT STORM scenario, the JFFC probably will work target sets and areas, and not individual targets. One noted there are other attack means not under JFACC ATO--JPOTF, JSOTF, and ATACMS. The TLAM release request was worked by one JFFC through his TLAM targeteer. Regarding weaponeering, only target-to-weapon pairing was done by the JFFC to make sure the right component was paired with the right target, allocated, and the attack diverted or delayed if the component's weapon system is not available.

3. **Other Literature.** Research was conducted at the TRADOC and Armed Forces Staff College libraries. Additionally, the preliminary coordination draft of JP 3-09 was provided to the study team. Summaries of the relevant information are provided below:

a. **Individual Studies.** Several military members/students or military school faculty members have written papers or periodical articles touching on the subject of joint fires. Over 70 such documents were considered and 8 yielded some information which mostly confirms information taken from all collected data. It is interesting that several authors used the term "operational fires" (lethal and nonlethal) as an equivalent to joint fires and these authors address the delivery platforms as the familiar fixed-wing aircraft, ATACMS, TLAMs, etc. One study noted the importance of clearly defined interdiction priorities and commanders guidance.

b. **Joint Pub 3-09 PC Draft.** The definitions of fires, joint fires, and joint fire support are essentially no different from those in the final draft which is the genesis of this report. However, **the JFFC was replaced with the joint fires element (JFE) as an optional JTF J-3 staff element "that consolidates most of the joint force staff fires planning and synchronization capabilities. . . .** This element would be composed of a variety of experts from the JFC's staff (including the J-3's organic staff), the Service components, the combatant command, and elsewhere as needed. It would serve as the joint staff focal point for integrating and synchronizing targeting guidance, fires planning, and staff efforts in meeting the joint forces' fires requirements. Specific duties would be assigned by the J-3 with approval of the JFC. The JFE provides recommendations to the J-3. Potential duties include: (1) Advise the J-3 on fires and monitor critical targeting information for the J-3; (2) develop appropriate staff estimates and operation plans (OPLANs) annexes; and (3) provide recommendations during development of courses of actions and provide administrative support to the JTCB."<sup>68</sup>

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## CHAPTER III

### ANALYSIS RESULTS

#### SECTION A: COMMAND FOCUS

The data clearly indicates a difference in the joint fires focus of the JFC and the joint force component commanders. Both operate at the operational and tactical levels, but the JFC focuses on providing broad guidance, priorities, and objectives while the components apply JFC guidance during execution planning. **The JFC is concerned with arranging the activities of each component in time, space, and purpose while the component commanders are concentrating on synchronizing their operations (air, land, sea, or special operations).** During these processes, the JFC should ensure the components have the resources, procedures, and organization required to accomplish assigned tasks; that they understand JFC guidance, priorities, and objectives and are complying; and there is a system in place to assess the results of component efforts. The JFC's staff, primarily the J-3, assists with carrying out these responsibilities.

#### SECTION B: J-3 JOINT FIRES ROLE/FUNCTIONS/TASKS

The J-3 must support the JFC in planning, organizing, coordinating, integrating, synchronizing, and directing all operations. **The J-3 is concerned with developing clear, concise guidance, plans, and/or orders for JFC approval; ensuring they are understood and disseminated; and establishing and operating systems to keep the staff and components focused on the campaign/operation plan.** The J-3 normally will not be involved in the details of execution planning, but select details of component operations and capabilities must be provided to the J-3. The J-3's duties will require extensive coordination with counterparts at higher, adjacent, and subordinate commands and within the HQ using staff channels. The J-3 joint fires functions are extensive enough to require the assistance of a full-time JFFC and cell.

#### SECTION C: JFACC JOINT FIRES ROLE/FUNCTIONS/TASKS

The JFACC is unique among joint force components because of theater/JOA-wide joint fires responsibilities and usually majority ownership of deep attack capabilities. Further, the JFACC concept, organization, and procedures are relatively standardized in joint doctrine and SOPs. **JFCs usually have relied on the JFACC as their joint fires coordinator.** The JFACC converts the JFC's targeting guidance into products that can be used to assess targeting/attack efforts and execute attacks. The JFACC produces a JIPTL, MAAP, and ATO; conducts CAS; and supervises the execution of the ATO. These efforts, among many other presteps, require considerable coordination with other members of the joint force, hence liaison teams like the BCD are relied upon. The JFACC has been organized and procedures have been developed to accommodate the processes. Nevertheless, the JFACC has some limitations in control of all joint fires resources (e.g., TLAM, ATACMS) and awareness of special operations and nonlethal

strategies, thus an opportunity may exist to not consider all joint fires aspects during development of the air plan.

#### **SECTION D: LEVEL OF EFFORT AND INFLUENCE**

**The level of effort and influence a J-3/JFFC or JFACC has regarding joint fires in support of the JFC's objectives is systemic and situation dependent.** Their level of effort and influence are systemic because of their doctrinal focus and their roles in joint operations as discussed in the preceding sections. Further, the operational situation may dictate varying degrees of effort and influence through the phases of a joint operation. For example, during a crisis which requires an immediate response, the JFC may depend upon a component such as the JFACC for joint fires advice, planning, and execution as the main effort to include serving as advance force commander, while the J-3/JFFC monitors joint fires activities. During subsequent phases of the campaign/operation, such as lodgment and decisive combat, the J-3/JFFC then may assume the primary joint fires advisor role regarding targeting guidance objectives, and priorities; and synchronization with other aspects of the campaign/operation such as operational maneuver. The JFACC then may return to concentrating on execution planning and execution to achieve the JFC's objectives. During a relatively less volatile crisis situation, the J-3/JFFC may assume the primary joint fires advisor role during all phases of an operation, while the components like the JFACC concentrate on execution planning and execution throughout. Figures III-1 and III-2 are based on study data and are provided to illustrate joint fires tasks differences between the J-3/JFFC and JFACC during joint operation phases and the targeting cycle, respectively.

OPERATION PHASE	J-3/JFFC TASKS	JFACC TASKS
Prehostilities (Including CAP)	<ul style="list-style-type: none"> <li>• Prepare staff estimates of joint fires for each proposed COA by advising on technical and logistical aspects of weapons systems to achieve theater aims/objectives</li> <li>• Develop the joint fires appendix to the operations annex to include concept of joint fires and priorities for each phase, FSCMs, joint fire support methods/requests procedures, and targeting procedures</li> <li>• Review/updated targeting guidance/obj/priorities for current phase and next phase</li> <li>• Develop HPTL and restricted and no-fire target lists</li> <li>• Review the JIPTL daily for compliance with JFC's intent</li> <li>• Develop JTCB role and design the JTCB meeting agenda</li> <li>• Prepare info for JTCB presentation and review</li> <li>• Draft TARBUL for J-3 release; address JTCB decisions, allocation of assets, targeting guidance, additions to the JTL and restricted target list, &amp; FSCMs</li> </ul>	<ul style="list-style-type: none"> <li>• Advise JFC on employment of assigned capabilities</li> <li>• Serve as advance force commander during immediate crisis response situation</li> <li>• Develop procedures for managing targeting and ATO development--operate a JTCB, if authorized by JFC</li> <li>• Develop supporting air operations plan(s)</li> <li>• Recommend apportionment of air assets, after consultation with components, to JFC</li> <li>• Coordinate with other components/staff members to prioritize and deconflict component and JFC target lists - develop a JIPTL using JFC targeting guidance and priorities</li> <li>• Conduct weaponeering for the approved JIPTL</li> <li>• Develop a MAAP, if required</li> <li>• Coordinate with other components to develop an ATO, if required</li> </ul>
Lodgment	<ul style="list-style-type: none"> <li>• Review/modify current targeting guidance/obj/priorities &amp; Review/update for the next phase/branch/sequel</li> <li>• Review/modify HPTL, restricted, and no-fire target lists</li> <li>• Review the JIPTL daily for compliance with JFC's intent</li> <li>• Ensure joint fire support can be accomplished (assets, procedures, C4 systems support)</li> <li>• Coordinate joint fire support, if required</li> <li>• Maintain joint fires systems operational/logistics awareness.</li> <li>• Prepare info for JTCB presentation and review</li> <li>• Draft TARBUL for J3 release,</li> </ul>	<ul style="list-style-type: none"> <li>• Recommend apportionment of air assets</li> <li>• Coordinate with other components/staff members to prioritize and deconflict component and JFC target lists - develop/refine JIPTL using updated JFC targeting guidance and priorities</li> <li>• Conduct weaponeering for the approved JIPTL</li> <li>• Develop a MAAP</li> <li>• Coordinate with other components to develop an ATO</li> <li>• Allocate CAS assets IAW JFC apportionment decision</li> <li>• Coordinate and provide CAS</li> </ul>
Decisive Combat and Stabilization	<ul style="list-style-type: none"> <li>• (Same as the lodgment phase)</li> </ul>	<ul style="list-style-type: none"> <li>• (Same as the lodgment phase)</li> </ul>
Follow-through	<ul style="list-style-type: none"> <li>• (Same as the lodgment phase)</li> </ul>	<ul style="list-style-type: none"> <li>• (Same as the lodgment phase)</li> </ul>
Post Hostilities	<ul style="list-style-type: none"> <li>• Review/modify nonlethal targeting guidance/obj/priorities, if required</li> <li>• Prepare after-action reports and JULLS</li> <li>• Disestablish the JTCB, as required</li> </ul>	<ul style="list-style-type: none"> <li>• Support nonlethal requirements and lethal options through continued development of ATOs, as required</li> <li>• Prepare after-action reports and JULLS</li> <li>• Disestablish JFACC organization on order of JFC</li> </ul>

Figure III-1. Joint Fires Task-Assignment Matrix During Joint Operations Phases

TARGETING PHASE	J-3/JFFC TASKS	JFACC TASKS
Commander's Guidance and Objectives	<ul style="list-style-type: none"> <li>Develop/review/update/disseminate targeting guidance</li> <li>Est JTCB--develop JTCB role/responsibilities/agenda</li> <li>Review recommended air apportionment</li> <li>Establish HPTs timing/define desired weapons effects</li> <li>Publish JTCB decisions</li> </ul>	<ul style="list-style-type: none"> <li>Develop and recommend air apportionment in consultation with other component commanders</li> <li>Establish procedures to manage assigned targeting functions (Note this may also include management of a JTCB as in USCENTCOM &amp; Korea)</li> </ul>
Target Development	<ul style="list-style-type: none"> <li>Coordinate organic collection efforts with the J-2</li> <li>Integrate space systems support</li> <li>Develop/maintain HPTL, no-strike/protected target list</li> <li>Review JIPTL for compliance with JFC guidance--promulgate</li> <li>Nominate IO, EW, and deception plan targets</li> </ul>	<ul style="list-style-type: none"> <li>Identify, prioritize, and nominate targets</li> <li>Consolidate, review, deconflict, and prioritize targets nominated by other components or the JFC</li> <li>Produce a JIPTL per JFC targeting guidance</li> </ul>
Weaponneering Assessment	<ul style="list-style-type: none"> <li>May match target sets with components</li> </ul>	<ul style="list-style-type: none"> <li>Determine target attack objectives</li> <li>Develop target descriptions</li> <li>Apportion air assets per JFC decision</li> <li>Recommend the number/type of weapons, delivery platform(s) and aim point</li> <li>Identify target area threats</li> <li>Develop the probability of destruction</li> <li>Recommend targets to TLAMs and CALCMs in coordination with NAVFOR/AFFOR</li> </ul>
Force Application	<ul style="list-style-type: none"> <li>Recommend, coordinate, synchronize, and allocate surface-to-surface deep strike weapons and joint fire support not under JFACC control</li> </ul>	<ul style="list-style-type: none"> <li>Review other components' direct support plans</li> <li>Develop and publish a MAAP or MAP depending on JFC guidance</li> </ul>
Execution Planning and Force Execution	<ul style="list-style-type: none"> <li>Issue frag/attack orders for joint fires not on the ATO</li> </ul>	<ul style="list-style-type: none"> <li>Develop, promulgate and disseminate the ATO or ITO depending on JFC guidance</li> <li>Supervise execution of the ATO</li> </ul>
Combat Assessment	<ul style="list-style-type: none"> <li>Direct and coordinate combat assessments</li> </ul>	<ul style="list-style-type: none"> <li>Provide BDA, munitions effectiveness assessments, and reattack recommendations to the JFC</li> </ul>

Figure III-2. Joint Fires Task-Assignment Matrix During the Targeting Cycle

## SECTION E: JTCB JOINT FIRES ROLE/FUNCTIONS/TASKS

The JTCB directly supports the JFC and component commanders by providing a forum for senior leadership to review targeting information, the apportionment recommendation, and combat assessment information. Approved joint doctrine and SOPs attribute functions such as develop/refine target lists; develop, refine, and promulgate targeting guidance/strategy; define desired effects; develop/review/promulgate the JTL/JIPTL; develop/maintain a list of restricted targets/no-fire areas; review the campaign plan; recommend supplemental ROE; promulgate a JTCB decision message; conduct targeting for IO assets; monitor BDA evaluations; and initiate tasks to components to strike JIPTL targets not assigned to the JFACC. **Each of these tasks will require far more time and effort than a group of senior officers meeting for an hour can or are willing to provide.** Consequently, the JTCB either has evolved into an executive board supported by subordinate cells (targeting, synchronization, planning), or it uses J-3 and J-2 personnel to assist. The functions of the JTCB in coordinating joint fires are, in practice, performed on a 24-hour/day basis; not just during a one-hour information/decision briefing session.

## SECTION F: DUPLICATION AND CONFLICT ISSUES

1. General. There is duplication and potential for duplication and conflict in assigned joint fires coordination functions and tasks of the JFACC, JTCB, and the JFFC. However, **some duplication is actually appropriate and others may be avoided by clearly defining the role, and functions and tasks of the JFFC.**

2. JFFC and JTCB. **Duplication primarily exists between the documented functions and tasks of the JFFC in SOPs and those outlined for the JTCB. This situation is not undesirable** because the JTCB functions must be supported by a cell or staff on a 24-hour/day basis as discussed above. The JTCB cannot review information like the JIPTL or BDA for the purpose of making critical decisions without a preview and recommendation by a supporting agent like the JFFC. The JTCB cannot conduct an organized, efficient meeting which presents critical information succinctly without a supporting agent like the JFFC. Furthermore, the JTCB chairman and members often will desire joint fires advice/information prior to and outside of board meetings. This need can be satisfied by the JFACC most of the time, but the JTCB chairman and members will presumably get a “big picture” view from the JFFC. Also, it may be more practical in terms of proximity to rely on the counsel of a JFFC.

3. JFFC and JFACC

a. JIPTL Development. **A conflict of interest and temporary duplication of JFACC capabilities can emerge if the JFFC is authorized to develop the JIPTL.** The JFACC is currently organized and sanctioned by joint doctrine to develop the JIPTL--the J-3 would perform this task if there were no JFACC. Feedback from three former JFFCs indicates they have or would prefer to assume the development of the JIPTL, because it is key to ensuring the commanders guidance/priorities are being followed and joint fires are synchronized with the rest of the operation. This preference derives from difficulties (lost time, system

inflexibility, proximity, philosophical conflicts) in correcting JIPTLs which do not comply with the JFC's guidance, priorities, and concept of operations. JIPTL development requires considerable expertise already resident in the JFACC's organization to theoretically employ a strategy-to-task process in support of the JFC's campaign plan. It will be difficult for the JFFC to assume, nevertheless, JIPTL development may migrate to the JFFC as the joint force headquarters' role, C4 systems support, and component weapons systems evolve. Should the JFFC be tasked to develop the JIPTL, expertise and support for the task would have to be obtained from joint force internal and external resources. Diverting this function from the JFACC to the JFFC may be resisted. This study does not propose to migrate JIPTL development to the JFFC, but prudent analysis needs to identify the possibility. Accordingly, establishing the JFFC concept contains potential for a conflict of interest and a temporary duplication of capabilities regarding JIPTL development until the issue is refined through doctrine, training, and experience.

b. Joint Fire Support. **The JFACC and the JFFC may be at odds regarding joint fire support.** The JFACC has numerous liaisons and air support coordination elements to coordinate CAS for maneuver components and SOF. The JFFC could easily become involved in the process, since components tend to go to higher headquarters rather than adjacent units for support they need. This situation should be the rare exception as it is for JTCB meetings and not become an established procedure.

### SECTION G: JFFC's VALUE ADDED

**The JFFC's overarching "value added" is tied directly to the JFC's inherent requirement to synchronize maneuver and interdiction, and the J-3's responsibility to plan, coordinate, and integrate operations in support of the JFC's campaign/operation. Both the JFACC and JTCB are involved in the coordination and synchronization of joint fires, but they are limited by time or position and cannot synergize the joint fires piece and other major pieces such as maneuver, IO, special operations, and logistics.** The JTCB has a macro focus on joint targeting and does not operate on a 24-hr/day basis. The JFACC's focus and function is joint air targeting and air operations coordination and synchronization. Therefore, the JTCB and JFACC cannot effectively coordinate the synchronization of joint fires, maneuver, IO, special operations, and logistics as could a JFFC on the JFC's staff. The JFFC also adds value through development and articulation of clear, workable joint fires guidance on behalf of the JFC by translating the commanders intent and concept of operations into targeting guidance, objectives, and/or priorities. Additionally, the JFFC can help eliminate confusion by clearly defining the desired weapons effects which will be associated with targets. For example, what does neutralization, destruction, degradation etc. really mean? Joint force members are heavily influenced by experience and perception which can produce divergent interpretations of weapons effects. Therefore, a tailored definition of weapons effects disseminated properly can significantly assist joint targeting and combat assessment efforts.



## SECTION H: JOINT DOCTRINE SHORTFALLS

1. JFFC Concept. Joint force efficiency and working relationships are hampered by a lack of joint doctrine on the JFFC. The data clearly indicates some JFCs feel so strongly about the need for a JFFC that they have established the position with a supporting cell under their J-3 during several joint exercises and at least one joint operation. However, the JFFC and cell has often been plagued by inadequate manning and C4 systems support, no training, shortfalls in expertise, and nonacceptance by joint force members. As one interviewee suggested, **the joint community has to “grow a JFFC”** and that means establishing JFFC joint doctrine, training, and a typical organization, much like what was done during development of the JFACC concept.

2. What’s in a Name? The title of the agent(s) who perform the joint fires functions and tasks at the joint force headquarters has been an obstacle to progress in joint doctrine development. **The idea of having a joint force fires coordinator in the joint force staff has been difficult to accept because commanders generally are assigned critical coordination functions in joint operations (e.g., joint rear area coordinator, airspace control authority) or are designated coordinating authorities for specific functions (e.g., ACC is coordinating authority for all fires between the FSCL and the DBSL in Korea).** Furthermore, the title “JFFC” defaults to visions of a “FSCOORD” who’s functions are hands-on and involved in current operations. Since joint doctrine and joint operations have been built on the idea that the JFC gives broad guidance and the components execute, it is not surprising that some would summarily object to a joint force fires coordinator who is not also the JFACC. The title appears to be an impediment to progress on a very important function described above in Section G.

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## CHAPTER IV

### CONCLUSIONS

**1. The JFFC concept has enough merit to warrant inclusion of the JFFC's role, functions, and duties in developing publications like JPs 3-09, "Doctrine for Joint Fire Support," and 3-56, "Command and Control Doctrine for Joint Operations." The title of the action agent and/or cell is unimportant--the descriptions of the joint fires functions and tasks and where they are performed are key.**

a. Advantages:

- **Improved joint operations efficiency through synchronization of joint fires with other elements such as maneuver, IO, special operations, and logistics. This is the overriding factor in weighing the pros and cons of the JFFC concept.**
- More informative and efficient JTCB meetings which will be allowed to achieve their intended purpose as macro level review mechanisms--freed from distracting details and conflicting information through the efforts of a JFFC.
- Improved clarity of the JFC's concept of fires and targeting guidance/objectives/priorities which should make it easier for components to apply during targeting.

b. Disadvantages:

- **Unfettered and without carefully defined responsibilities and functions, the JFFC could become a obstacle to efficient joint fires and joint targeting coordination efforts of the JFACC, BCD, and/or JTCB**
- Joint Force personnel augmentation requirements may increase by as many as 20 or 30.
- It may be difficult to adequately train or prepare personnel to serve in JFFC cell billets.
- C4 systems support and facilities demands at the joint force headquarters will increase.
- Targeting information flow in some commands may become more complicated with another dedicated node to satisfy.

**2. The JFFC concept is not universally applicable and should be discussed in joint doctrine as an option.** Operations with little or no maneuver or primarily air delivered ordnance may not require a JFFC. On the other hand, operations with little or no lethal fires may require a JFFC, but no JFACC. The JFC's preferences, theater structure, and the operational mission and situation also will have an influence, so flexibility should be built into joint doctrine.

3.. **The level of effort and influence of a JFFC regarding joint fires planning and advice is mission dependent and can vary with joint operation phases.** A component such as the JFACC may have a greater level of effort and influence in the prehostilities (deterrent) phase of an operation as the advance force commander while the JFFC may be newly formed and only capable of monitoring joint fires. During subsequent phases such as lodgment and sustained combat, the JFFC may become more influential and capable regarding joint fires advisory and planning functions.

4. **Several JFCs strongly support the JFFC concept in their SOPs and through experimentation in joint exercises.** JFFC acceptance in joint doctrine will introduce a ripple effect, beginning with further JFFC experimentation, followed by documented feedback, and ultimately an effort to refine the JFFCs role. Simultaneously, the concepts and definitions of fires, joint fires, and fire support, along with the JFFC concept will be introduced in other doctrine such as Joint Pubs 1-02, 3-56.1, 3-09.3, etc. during revisions. **The JFFC will survive in joint doctrine as joint force headquarters gain acceptance as capable warfighting staffs--headquarters which exercise full command and control of the components.**

5. After JFFC acceptance in joint doctrine, joint commands will modify their SOPs to specify JFFC responsibilities, duties, and information flow requirements during joint targeting. **One significant change could be assigning JIPTL development and refinement to the JFFC rather than the JFACC.** This issue also will surface during the development of Joint Pub 3-60, "Joint Doctrine for Targeting." Other significant impacts on targeting procedures are not likely since the J-3 is currently recognized as an active participant in commander's guidance, target development, and combat assessment.

6. **There will be a cost in training, equipment, and manpower once the JFFC concept is outlined and approved in joint doctrine. Shortfalls in these areas have adversely affected previous JFFC experiments in joint exercises.** The cost should be much lower than that for other functions such as a JFACC. Nevertheless, individuals without appropriate backgrounds cannot be expected to fill the JFFC cell billets or show up for the operation without some guidance and training on their duties. The JFFC cells must have dedicated C4 systems support.

## CHAPTER V

### RECOMMENDATIONS

**1. Establish in Joint Pubs 3-09, “Doctrine for Joint Fire Support,” and 3-56, “Doctrine for C2 of Joint Operations,” the below listed joint fires coordination functions and tasks as J-3 responsibilities. Further establish that the J-3 may be assisted, depending on the level of effort and operational situation, in these responsibilities by a senior subordinate (e.g., Joint Fires Officer) with a supporting cell (e.g., Joint Fires Element).**

a. Serve as principal staff advisor to the JFC responsible for the coordination, integration, and synchronization of joint fires with other major elements of the campaign/operation such as maneuver, information operations, special operations, and logistics. This function may include the following tasks:

- (1) Development of joint fires estimates for COA development/refinement.
- (2) Development and promulgation of a joint fires appendix to the OPORD.
- (3) Periodic assessments of “joint fires” support of the campaign/operation.
- (4) Development of joint targeting guidance, objectives, and priorities for JFC approval.
- (5) Delineation of desired weapons effects and timing of those effects primarily for high value and high payoff targets.
- (6) Development and promulgation of joint targeting procedures.
- (7) Coordination of combat assessment efforts by the joint force.
- (8) Recommendation, coordination, review, designation, and dissemination of FSCMs.
- (9) Maintenance of current joint fires operations and logistics awareness.

b. Establish and serve as a member of the JTCCB responsible for the following tasks:

- (1) Development of the role, functions, and agenda of the JTCCB for JFC approval.
- (2) Review of targeting information as it pertains to JFC targeting guidance, objectives, and priorities.
- (3) Executive assistant for administrative and logistic support.

**2. Address JIPTL development and refinement responsibilities in Joint Pub 3-60, “Joint Doctrine for Targeting.”**

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42. Joint Pub 3-56.1, Figure IV-2, IV-3.
43. Joint Pub 3-56.1, IV-8.
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45. Joint Pub 3-56.1, II-7.



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52. Joint Pub 3-0, IV-13,14.
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## **APPENDIX A**

### **JFFC STUDY REQUEST LETTER**

THE JOINT STAFF  
WASHINGTON, DC

Reply ZIP Code:  
20318-7000

14 NOV 96

#### **MEMORANDUM FOR CHIEF OF DOCTRINE DIVISION, JOINT WARFIGHTING CENTER**

Subject: Joint Force Fires Coordinator

1. The Joint Force Fires Coordinator (JFFC) concept is formally introduced into joint doctrine in Joint Publication 3-09, "Doctrine for Joint Fire Support." Conflicting Service perspectives indicate the JFFC concept is an issue that may require a CJCS decision. JWFC assistance will be essential to study and prepare this issue for decision.
2. Request the JWFC conduct a detailed study of the JFFC concept by 31 January, 1997. This study should consider the advantages, disadvantages, long range implications, impact on joint doctrine and joint targeting procedures, lessons learned from joint exercises, and a recommendation reference the JFFC. JWFC assistance and this study will be important to develop a Joint Staff position and provide a recommendation to the CJCS regarding the JFFC.
3. Point of contact is LTC Heritage, USA, DSN 224-6492.

DENNIS C. DIMENGO

COL, USA

Chief of Joint Doctrine Division, J-7

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## APPENDIX C

## UJTL FIREPOWER TASKS MATRIX

<b>OPERATIONAL FIREPOWER RELATED &amp; SUBORDINATE TASKS*</b>	
1.	<b>OP 3 EMPLOY OPERATIONAL FIREPOWER.</b> Employ lethal and nonlethal means to defeat enemy forces or to maintain freedom of movement. . . .
2.	<b>OP 3.1 Conduct Joint Force Targeting.</b> Identify and select land, sea, and air targets (such as WMD targets) that decisively impact campaigns and major operations and match the targets to appropriate joint or multinational operational firepower.
3.	<b>OP 3.1.1 Establish Joint Force Targeting Guidance.</b> Provide joint force commander's guidance and priorities for targeting and identification of requirements by components; the prioritization of these requirements; the acquisition of targets or target sets; and the attack of targets by components. The guidance and prioritization matches objectives and guidance with inputs from intelligence and operations personnel to select specific targets.
4.	<b>OP 3.1.2 Assign Joint/Multinational Operational Firepower Resources.</b> Assign operational firepower means to operational targets consistent with the joint force commander's plan and intent. To determine and designate the total expected effort by percentage and/or priority that should be devoted to the various air operations and/or geographic areas for a given period of time. Allocation of firepower resources allows the joint force commander to ensure the weight of the joint firepower effort is consistent with campaign phases and objectives.
5.	<b>OP 3.1.3 Develop Operational Targets.</b> Evaluate and choose operational targets for attack to achieve optimum effect on enemy decisive points and centers of gravity consistent with the operational level joint force commander's intent.
6.	<b>OP 3.1.4 Prioritize High-Payoff and High-Value Targets.</b> Rank order high-payoff targets (HPT) and high-value targets (HVT) in the order of their importance and selected attack sequence in attacking decisive points and defeating enemy centers of gravity within the context of the commander's campaign plan.
7.	<b>OP 3.1.5 Publish Tasking Order(s) for Employment of Air Assets and Other Means.</b> Assign missions and specific taskings to each joint force subordinate command employing air assets or other means in the airspace control area of the AOR/JOA. Typically, this task pertains to the air tasking order (ATO). Normally published daily, the ATO is disseminated to appropriate units and C2 agencies. It provides specific instructions to each projected mission as well as general instructions and notification to all joint forces. The ATO can also be used to notify supported land and sea forces of expected missions.
8.	<b>OP 3.1.6 Conduct Operational Combat Assessment.</b> Determine the overall effectiveness of joint and multinational forces employment in the operational area as it relates to strategic and operational objectives in subordinate campaigns and major operations.
9.	<b>OP 3.1.7 Develop Fire Support Coordination Measures.</b> Develop measures and the procedures associated with those measures to assist in the C2 of joint forces fire support coordination. . . .
10.	<b>OP 3.2 Attack Operational Targets.</b> To engage operational level targets and to shape and control the tempo of campaigns using all available joint and multinational operational firepower (includes ground, naval, air, space, and SOF conventional and special munitions) against land, air, and maritime (surface and subsurface) targets having operational significance. Operational targets can be conventional or NBC (weapons of mass destruction) related.
11.	<b>OP 3.2.6 Provide Firepower in Support of Operational Maneuver.</b> To support land and sea joint operational maneuver as part of the JFC's campaign or major operation plan by engaging operational land, sea, air, and space targets (air targets other than air defense, anti-air, or defensive counter air targets) with available joint and multinational operational firepower delivery systems.
12.	<b>OP 3.2.7 Synchronize Operational Firepower.</b> Synchronize, and integrate as necessary, operational attacks on single or multiple operational targets at the decisive time and place. This integration includes lethal and/or nonlethal attacks, to include friendly C2W and EW measures and minimizing their effect on friendly forces, neutrals, and noncombatants.

<b>OPERATIONAL FIREPOWER RELATED &amp; SUBORDINATE TASKS*</b>	
13.	<b>OP 1.2.4 Conduct Operations in Depth.</b> To conduct various types of operations to operational depths in achieving a position of advantage for the defeat or neutralization of enemy operational forces in order to accomplish operational or strategic objectives. This task includes conventional forces and SOF. . . .
14.	<b>OP 2.2 Collect Operational Information.</b> To gather information from operational and tactical sources on operational and tactical threat forces and their decisive points (and related high-payoff targets such as WMD production, infrastructure and delivery systems). It also includes collection of information on the nature and characteristics of the assigned area of responsibility (including area of interest). . . .
15.	<b>OP 5.2 Assess Operational Situation.</b> To evaluate information received through reports or the personal observations of the commander on the general situation in the theater of operation and conduct of the campaign or major operation. In particular, this activity includes deciding whether different actions are required from those that would result from the most recent orders issued. This includes evaluating operational requirements of subordinate task forces and components.
16.	<b>OP 5.3 Prepare Plans and Orders.</b> To make detailed plans, staff estimates, and decisions for implementing the theater combatant commander's theater strategy, associated sequels, and anticipated campaigns or major operations. . . .
17.	<b>OP 5.4.4 Synchronize/Integrate Operations.</b> To arrange land, air, sea, and space operational forces in time, space, and purpose to produce maximum relative combat power at the decisive point. This activity includes the vertical and the horizontal integration of tasks in time and space to maximize combat output. Synchronization ensures all elements of the operational force, including supported agencies' and nations' forces, are efficiently and safely employed to maximize their combined effects beyond the sum of their individual capabilities. This includes synchronizing support to a supported command. Synchronization permits the friendly commander to get inside the enemy commander's decision cycle.
18.	<b>OP 5.6 Employ Operational Information Warfare (IW).</b> To integrate the use of operations security, military deception, psychological operations, electronic warfare, and physical destruction, mutually supported by intelligence, in order to deny information, influence, degrade, or destroy adversary information, information-based processes, and information systems, and to protect one's own against such actions. As a subset of IW, C2W is an application of IW in military operations that focuses on C2 capabilities.

\* There are similar firepower tasks for the strategic national, strategic theater, and tactical levels

## APPENDIX D

### JOINT FIRES TASK-ASSIGNMENT MATRIX

#### Part 1: JFC

TASK	PRIMARY ASSIGNED AGENT	ALTERNATE ASSIGNED AGENT	SOURCE
1. Organize the staff and assign responsibilities to individual Service members assigned to the staff as deemed necessary to ensure unity of effort and accomplishment of assigned missions	JFC		JP 0-2 page IV-12
2. Organize a JTCB (TYPICALLY)	JFC		JP 3-0 page III-26
3. Task commanders or staff officers with the JTCB function based on the JFC's concept of operations and the individual's experience, expertise, and situational awareness appropriate to the situation	JFC		JP 3-0 page III-26
4. Define the role of the JTCB	JFC		JP 3-0 page III-26
5. Delegate the authority to conduct execution planning, coordination, and deconfliction associated with targeting (NORMALLY)	JFC		JP 3-0 page III-26
6. Designate a JFACC, whose authority and responsibilities are defined by the establishing JFC based on the JFC's concept of operations (NORMALLY)	JFC		JP 3-0 page II-15
7. Provide/issue targeting guidance, objectives and priorities	JFC		JP 3-0 page III-26
8. Provide TLAM/CALCM systems via the JTCB	CINC		CCR 525-1 VOL I page III-2
9. Chair the JTCB	DCINC		CCR 525-1 VOL I page III-3
10. Convene JTSG to apply CINC's obj to broad targeting guidance, conduct strategic planning outside the JOA & integrate special technical ops/national assets not under JFC OPCON into the joint campaign	CINCPAC		USPACOM JFACC CONOPS pages 5 and 15
11. Approves apportionment of air assets	CINCCFC		Deep Ops Primer - Korea page 10

TASK	PRIMARY ASSIGNED AGENT	ALTERNATE ASSIGNED AGENT	SOURCE
12. Approves positioning of the FSCL and DBSL	CINCCFC		Deep Ops Primer - Korea page 10
13. Assign and release TLAMs to targets	CINC	CJTF	XVIII ABC JTF SOP page 4-1-3
14. Employ various maneuver and movement control and FSCMs	JFC		USPACOM JFACC CONOPS page 15
15. Direct target priorities, relative levels of effort, and the sequence of those efforts to components. State military objectives and clear definition of what constitutes success - ID initial targeting priorities, planning guidance, appropriate maneuver and movement control, FSCMs, and criteria for defining DS sorties	JFC		USPACOM JFACC CONOPS pages 9 and 15
16. Establish JFACC and JTCB as required	JFC		USPACOM JFACC CONOPS page 15
17. Approve the JTL and JIPTL	JFC		USPACOM JFACC CONOPS page 16
18. Issue apportionment guidance in form of air apportionment message	JFC		USPACOM JFACC CONOPS pages 16 and 19
19. Direct overall combat assessment effort to analyze the joint force campaign	JFC		USPACOM JFACC CONOPS page 10
20. Release Fires and Maneuver Message which provides broad guidance and intent to JFACC	JFC	JTCB	USPACOM JFACC CONOPS page 19
21. Release the Target Bulletin to provide continuous update to active or potential target list that may be attacked or no-strike targets	JFC		USPACOM JFACC CONOPS page 20
22. Articulation of supported - supporting relationships	JFC		USACOM SOP (DRAFT) Annex B par 3b
23. Determine the weight of effort	JFC		USACOM SOP (DRAFT) Annex B par 3b
24. Apportion and allocate resources	CJTF		USACOM SOP (DRAFT) Annex B pars 3b & 4e(1) USACOM SOP (DRAFT) Annex C pars 6a(2) XVIII ABC JTF SOP page 4-1-1
25. Provide/issue targeting guidance, objectives and priorities	CJTF		USACOM SOP (DRAFT) Annex B par 3b USACOM SOP (DRAFT) Annex C pars 6a(1)
26. Directs the formation, composition, and specific responsibilities of a JTCB	CJTF		USACOM SOP (DRAFT) Annex C par 6a(4)

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
27. Approves and directs execution of the JIPTL	CJTF		USACOM SOP (DRAFT) Annex C par 6a(5)
28. Provide/issue targeting guidance, objectives and priorities	CJTF		XVIII ABC JTF SOP page 4-1-1
29. Establish the timing and effects required for specific targets	CJTF		XVIII ABC JTF SOP page 4-1-1
30. Task components to strike or support specific targets	CJTF		XVIII ABC JTF SOP page 4-1-1
31. Issue guidance on allocation, planning, coordination, tasking, and execution of joint fires and interdiction	CJTF		XVIII ABC JTF SOP page 4-1-4
32. Approve the JIPTL, if developed	JFC		USARCENT JTF HQ SOP page 3-B-1-6
33. Issue the apportionment decision	JFC		USARCENT JTF HQ SOP page 3-B-1-6
34. Define criteria for direct support sorties for each component	JFC		USARCENT JTF HQ SOP page 3-B-1-6
35. Provide targeting guidance and priorities	JFC		USARCENT JTF HQ SOP page 3-C-1
36. Task components to strike or support specific targets	JFC		USARCENT JTF HQ SOP page 3-C-1
37. Establish the timing and effects required for specific targets	JFC		USARCENT JTF HQ SOP page 3-C-1

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**APPENDIX D (Cont)**

**JOINT FIRES TASK-ASSIGNMENT MATRIX**  
**Part 2: JOINT FORCE STAFF**

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
1. Develop estimates and guidance for tasking of collection assets	JTF Staff		XVIII ABC JTF SOP page 4-1-5
2. Selection of an attack means	JTF Staff		XVIII ABC JTF SOP page 4-1-5
3. Develop requirements for post-attack assessment	JTF Staff		XVIII ABC JTF SOP page 4-1-6
4. Support and coordinate CFC/GCC target development	C-2		Deep Ops Primer - Korea page 11
5. Nominates targets to C-3 Operations Division, Fire Support Branch, for CUWTF to execute	C-2		Deep Ops Primer - Korea page 11
6. Develops and approves restricted targets list and forwards to CTB	C-2		Deep Ops Primer - Korea page 11
7. Provide targeting intelligence to the JFACC in support of the joint air targeting cycle	JIC		USPACOM JFACC SOP page 8
8. Brief intelligence assessment (next 72 hrs) and BDA update (previous 24 hrs) to the JTCB	J2		CCR 525-1 VOL I page III-4
9. Collate valid targets for JTCB	JIC Targeting Cell		XVIII ABC JTF SOP page 4-1-6
10. Assist the commander in the discharge of assigned responsibility for the direction and control of operations, beginning with planning and follow-through until specific operations are completed. . In this capacity the division plans, coordinates, and integrates operations	Ops Division		JP 0-2 page IV-14
11. Operate the Joint Operations Center	J3		JP 0-2 page IV-14
12. Plan, coordinate, and integrate operations	J3 Division		JP 0-2 page IV-14
13. Publish CINC's targeting guidance/obj (CINC's Daily Guidance Letter)	C-3		Deep Ops Primer - Korea page 11, 23
14. Develops and approves protected target list and forwards to CTB	C-3		Deep Ops Primer - Korea page 11

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
15. Develops, for CINCCFC approval, the theater FSCMs and component or subordinate commanders' measures, and forwards to CTB	C-3		Deep Ops Primer - Korea page 11
16. Develops proposed placement of DBSL based on FSCL in coordination with components and submits to CTB for comment	C-3		Deep Ops Primer - Korea page 12
17. Notify appropriate authorities of changes to DBSL and FSCL	C-3		Deep Ops Primer - Korea page 12
18. Nominate CFC C2W targets to CTB	C-3		Deep Ops Primer - Korea page 12
19. Nominate targets in support of theater deception plan	C-3		Deep Ops Primer - Korea page 12
20. Prioritize component EW requests for submission to CTB	C-3		Deep Ops Primer - Korea page 12
21. Issue the CINC's planning directive as basis for initial target selection by each component 96 hours prior to execution of new CONOP	Battle Coordination Working Group		Deep Ops Primer - Korea page 22
22. Principal staff officer responsible for organizing, planning, directing, and controlling joint operations	J3		USACOM SOP (DRAFT) Annex B par 4b
23. Integrating and synchronizing the complementary capabilities of the joint forces	J3		USACOM SOP (DRAFT) Annex B par 4b
24. Plans and coordinates the execution of joint operations	J3		USACOM SOP (DRAFT) Annex C par 6c
25. Coordinates with the J2 to ensure intelligence community has required information/priorities for data collection and BDA	J3		USACOM SOP (DRAFT) Annex C par 6c
26. Coordinates closely with the J2 organic collection efforts	J3		USACOM SOP (DRAFT) Annex C par 6c
27. Develops combat assessments for the CJTF with (component and) the J2's BDA support	J3		USACOM SOP (DRAFT) Annex C par 6c
28. Recommending and publishing operational goals	J3		USACOM SOP (DRAFT) Chapt 3 par 2
29. Formulating requests for the use of nuclear weapons, chemical weapons, and riot control agents (RCA)	J3		USACOM SOP (DRAFT) Chapt 3 par 2

TASK	PRIMARY ASSIGNED AGENT	ALTERNATE ASSIGNED AGENT	SOURCE
30. Disseminating general targeting guidance	J3		USACOM SOP (DRAFT) Chapt 3 par 2
31. Establishing and/or operating a Joint Targeting Coordination Board (JTCB)	J3		USACOM SOP (DRAFT) Chapt 3 par 2
32. Initiating requests for operations conducted outside the assigned AOR	J3		USACOM SOP (DRAFT) Chapt 3 par 2
33. If no JFACC is designated, Recommending apportionment of air assets	J3		USACOM SOP (DRAFT) Chapt 3 par 2
34. Integrating requirements for space systems support into JTF plans	J3		USACOM SOP (DRAFT) Chapt 3 par 2
35. Conducting a campaign assessment for the Commander	J3		USACOM SOP (DRAFT) Chapt 3 par 2
36. Issuing orders to components and subordinate forces	J3		USACOM SOP (DRAFT) Chapt 3 par 2
37. Establishing liaison with supporting commands and agencies	J3		USACOM SOP (DRAFT) Chapt 3 par 2
38. Direct the attack of targets inside the normal ATO cycle	JTF J3		XVIII ABC JTF SOP page 4-1-4 assumption which is dependent on CJTF guidance
39. Primary responsibility for the JTCB	CCJ3-P		CCR 525-1 VOL I, page II-4 and III-4
40. Brief current operations update (last 24 hours) to JTCB	J3		CCR 525-1 VOL I page III-4
41. Disseminate general targeting guidance	J3		USARCENT JTF HQ SOP page 3-3
42. Recommend apportionment of air assets if no JFACC designated	J3		USARCENT JTF HQ SOP page 3-3
43. Establish and/or operate a JTCB	J3		USARCENT JTF HQ SOP page 3-3

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**APPENDIX D (Cont)**

**JOINT FIRES TASK-ASSIGNMENT MATRIX**  
**Part 3: JFFC**

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
1. Principal joint force fires advisor to the J3	JFFC		USACOM SOP (DRAFT) Annex B par 4c(2)
2. Focal point for the JFC level input to targeting, planning, and coordination of the joint force's fires	JFFC		USACOM SOP (DRAFT) Annex B par 4c(2)
3. Planning and executing the JFC's intent and concept of operations:	JFFC	Components J3 Staff JTCB	USACOM SOP (DRAFT) Annex B pars 3c, 4d, & 4e(2)
<ul style="list-style-type: none"> <li>Provide planning guidance to integrate and synchronize joint fires</li> </ul>		JFACC	USACOM SOP (DRAFT) Annex B par 4d
<ul style="list-style-type: none"> <li>Monitor higher headquarters, JTF Staff, and component target nominations</li> </ul>		JFACC	USACOM SOP (DRAFT) Annex B par 4d
<ul style="list-style-type: none"> <li>Recommend targeting guidance and priorities to the Commander</li> </ul>		JFACC JTCB	USACOM SOP (DRAFT) Annex B par 4d USACOM SOP (DRAFT) Annex B par 4e(1)
<ul style="list-style-type: none"> <li>Review and recommend establishment of joint level fire support coordination measures if applicable</li> </ul>		JFACC	USACOM SOP (DRAFT) Annex B par 4d
<ul style="list-style-type: none"> <li>Coordinate, synchronize and allocate joint fires resources for the JTF</li> </ul>		JFACC	USACOM SOP (DRAFT) Annex B par 4d
<ul style="list-style-type: none"> <li>Coordinate cross-Service surface to surface joint fire support with components, if applicable</li> </ul>		JFACC	USACOM SOP (DRAFT) Annex B par 4d
<ul style="list-style-type: none"> <li>Support a JTCB or other joint force coordination processes if established by the JFC</li> </ul>		JFACC	USACOM SOP (DRAFT) Annex B par 4d

TASK	PRIMARY ASSIGNED AGENT	ALTERNATE ASSIGNED AGENT	SOURCE
4. Preparation of joint fires annexes/fire support plans, as appropriate, for JFC level orders	Targeting/Fires Watch		USACOM SOP (DRAFT) par 20
5. Preparation of joint fire support estimates for course of action development	Targeting/Fires Watch		USACOM SOP (DRAFT) par 20
6. Recommend joint force level targeting guidance and targeting priorities to the J3 for consideration by the JTCB	Targeting/Fires Watch		USACOM SOP (DRAFT) par 20
7. Maintain a logistic awareness of fire support systems through close coordination with the J4	Targeting/Fires Watch		USACOM SOP (DRAFT) par 20
8. Coordinates cross service surface to surface fire support except those interdiction capable missile missions assigned to the JFACC	Targeting/Fires Watch		USACOM SOP (DRAFT) par 20
9. Provide JFC staff coordination for theater operations	Battle Management Cell (BMC)		CENTCOM R 525-24 page 3-2
10. Identify required changes in interdiction priority to the JTSG	BMC		CENTCOM R 525-24 page 3-2
11. Identify HVT/HPT categories and forward to JTSG for dissemination to components	BMC		CENTCOM R 525-24 page 3-2
12. Consolidate JFC, NCA, and special category targets and forward recommendations to JTCB for incorporation into the JTL	BMC		CENTCOM R 525-24 page 3-2
13. Coordinate/establish FSCMs for JFC	BMC		CENTCOM R 525-24 page 3-2
14. Advise JTSG on technical and logistical aspects of weapons systems	BMC		CENTCOM R 525-24 page 3-2
15. Prepare deep operations estimates for COA development	BMC		CENTCOM R 525-24 page 3-2
16. JTF staff proponent for fires	JFFC		XVIII ABC JTF SOP page 4-1-1
17. Develop recommend high payoff target list (HPTL)	JFFC		XVIII ABC JTF SOP page 4-5-1 XVIII ABC JTF SOP page 4-5-1
18. Principal joint fires advisor to CJTF	JFFC		XVIII ABC JTF SOP page 4-5-1 Via J3 and Deputy CJTF
19. Executive agent for setup, support, and conduct of the JTCB	JFFC		XVIII ABC JTF SOP page 4-5-1

TASK	PRIMARY ASSIGNED AGENT	ALTERNATE ASSIGNED AGENT	SOURCE
20. Monitor JTF-level fires effort	JFFC		XVIII ABC JTF SOP page 4-5-1
21. Review JTF component target nominations to ensure compliance with CJTF guidance, priorities, and ROE	JFFC		XVIII ABC JTF SOP page 4-5-1
	JGAT		USACOM SOP (DRAFT) Annex C pars 4b &5
22. Recommend JTF-level targeting guidance and priorities	JFFC		XVIII ABC JTF SOP page 4-5-1
23. Coordinates and maintains JTF No Strike/Protected Target List	JFFC		XVIII ABC JTF SOP page 4-5-1
24. Coordinate with JFACC for daily J3 review of JIPTL prior to JTCB	JFFC		XVIII ABC JTF SOP page 4-5-1
25. Writes fires portion of JTF level plans and OPORDs	JFFC		XVIII ABC JTF SOP page 4-5-1
26. Assist J3 in preparing taskings for nonair strikes	JFFC		XVIII ABC JTF SOP page 4-5-1
27. Recommends establishment and monitors joint FSCMs	JFFC		XVIII ABC JTF SOP page 4-5-1
28. Coordinate surface-surface deep strike weapons under JTF control	JFFC		XVIII ABC JTF SOP page 4-5-2
29. Disseminate CJTF/JTCB decisions and guidance on fires/targeting to JTF staff and components	JFFC		XVIII ABC JTF SOP page 4-5-2
30. Coordinate promulgation of JIPTL	JFFC		XVIII ABC JTF SOP page 4-5-2
31. Assist JTCB in developing a fully coordinated and synchronized joint fires employment concept	JFFC		XVIII ABC JTF SOP page 4-5-2
32. J3 action officer for joint firepower and joint fire support issues	Joint Force Firepower Coordinator (JFFC)		USARCENT JTF HQ SOP page 3-C-2-1
33. Provide admin and log support to JTCB - executive agent for JTCB	JFFC		USARCENT JTF HQ SOP pages 3-C-2-1 and 3-C-2-2
34. Review, recommend, and coordinate establishment of joint level FSCMs	JFFC		USARCENT JTF HQ SOP page 3-C-2-1
35. Prepare joint fire support estimates for COA development	JFFC		USARCENT JTF HQ SOP page 3-C-2-1

TASK	PRIMARY ASSIGNED AGENT	ALTERNATE ASSIGNED AGENT	SOURCE
36. Prepare joint fire support annexes/fire support plans, as appropriate, for JTF level orders	JFFC		USARCENT JTF HQ SOP pages 3-C-2-1 and 3-C-2-2
37. Monitor target nomination and maintain RTLs, PTLs, and HPTLs	JFFC		USARCENT JTF HQ SOP page 3-C-2-2
38. Recommend joint force level targeting guidance and targeting priorities to the J3 for consideration by the JTCB	JFFC		USARCENT JTF HQ SOP page 3-C-2-1
39. Reviews and recommends establishment of joint level FSCMs	JFFC		USARCENT JTF HQ SOP page 3-C-2-2
40. Recommend joint systems employment to support components	JFFC		USARCENT JTF HQ SOP page 3-C-2-1
41. Coordinate cross-Service surface to surface fire support systems through coordination with the J4	JFFC		USARCENT JTF HQ SOP page 3-C-2-1
42. Maintain logistic awareness of joint fire support systems through coordination with the J4	JFFC		USARCENT JTF HQ SOP page 3-C-2-1
43. Chairs the daily fires meeting	JFFC		USARCENT JTF HQ SOP page 3-C-2-4
44. Plan and synchronizes fire support <ul style="list-style-type: none"> <li>• Prepares Fire Support portion of the operation plan and order</li> <li>• Plans and coordinates engagement of surface targets, target acquisition radar emplacement, counterfire ops, and deception ops by fire support means</li> <li>• Coordinates efforts to suppress enemy air defenses with fire support means</li> <li>• Analyzes targets for possible engagement</li> <li>• Plans interdiction targets</li> <li>• Provides technical expertise regarding limiting requirement, troop safety, and collateral damage preclusion</li> <li>• Coordinates with other staff sections in all fires and target related fields</li> </ul>	Operational Firepower/targeting Cell		USARCENT JTF HQ SOP page 3-11



**APPENDIX D (Cont)**

**JOINT FIRES TASK-ASSIGNMENT MATRIX**  
**Part 4: JTCB**

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
1. Review target information	JTCB		JP 3-0 page III-26
2. Develop targeting guidance and priorities	JTCB		JP 3-0 page III-26
3. May prepare and refine joint target lists	JTCB		JP 3-0 page III-26
4. Should maintain a complete list of restricted targets and areas where special operations forces (SOF) are operating to avoid endangering current or future operations	JTCB		JP 3-0 page III-26
5. Serve as an Integrating center for (targeting) or a JFC-level review mechanism	JTCB		JP 3-0 page III-26
6. Coordinate: <ul style="list-style-type: none"> <li>• theater targeting efforts</li> <li>• targeting strategy</li> <li>• priority of effort</li> <li>• phasing/sequencing of targeting and asset apportionment to accomplish targeting objs</li> </ul>	Joint Targeting Steering Group (JTSG)		CENTCOM R 525-24 page 3-1
7. Assist JFC in developing theater targeting strategy	JTSG		CENTCOM R 525-24 page 3-2
8. Assist all components in translating JFC obj and guidance into component targeting obj and priorities	JTSG		CENTCOM R 525-24 page 3-2
9. Coordinate targeting information from components	JTSG		CENTCOM R 525-24 page 3-2
10. Review/approve the JTL	JTSG		CENTCOM R 525-24 page 3-2
11. Recommend apportionment of weapons systems to JFC to support theater strategy	JTSG		CENTCOM R 525-24 page 3-2
12. Act as advisory group to JFC to anticipate future ops for campaign plan	JTSG		CENTCOM R 525-24 page 3-2

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
13. Principal forum for USCINCCENT to provide intent and targeting guidance to the JFACC and other component and functional commanders	JTCB		CCR 525-1 VOL I, page II-2 and III-4
14. Discuss and coordinate targeting and battlefield geometry	JTCB		CCR 525-1 VOL I page III-4
15. Review (macro) target nominations to ensure consistency with JFC's campaign plan	JTCB		CCR 525-1 VOL I page III-4
16. Provide target priorities and desired effects	JTCB		CCR 525-1 VOL I page III-4
17. Promulgate and refine targeting guidance to components and functional commanders	JTCB		CCR 525-1 VOL I page II-4
18. Promulgate and refine targeting guidance to components and functional commanders	JTCB		USCENTCOM CONOPS for TMD; CCR 525-1 VOL I page III-3
19. Provide CINC intent and targeting guidance 72-96 hours out	JTCB		USCENTCOM CONOPS for TMD
20. Forum for JFC and component commanders to discuss and coordinate targeting, as well as review effects of previous guidance	JTCB		USCENTCOM CONOPS for TMD
21. Provide a macro-level review of target nominations to ensure consistency with the JFC campaign plan, target priorities, and desired effects	JTCB		USCENTCOM CONOPS for TMD
22. Provide targeting guidance for air defense, SOF, air, ground, naval, TLAM, C2W, and RSTA assets	JTCB		USCENTCOM CONOPS for TMD
23. Supporting staff element for JFACC on ATO planning guidance by: <ul style="list-style-type: none"> <li>• Assist and advise on ATO planning</li> <li>• Consolidate and prioritize target lists from all components and develop the JTL</li> <li>• Assist the JFACC in development of apportionment recommendations</li> <li>• Provide component expertise to the JFACC in non TACAIR weapons systems such as TLAMs, SOF, ATACMS, etc</li> </ul>	JTCB		CENTCOM R 525-24 page 3-3

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
24. Provide a forum for each warfighting component to review joint targeting guidance and apportionment, address component targeting requirements, target prioritization, and issue resolution	JTCB		USARCENT JTF HQ SOP page 3-B-1-6 and 3-C-1-1
25. Advise JFC on the plan to achieve overall theater aims and objs	JTCB		USARCENT JTF HQ SOP page 3-B-1-6
26. Assist all component in translating JFC objectives and guidance into coordinated component ops and plans	JTCB		USARCENT JTF HQ SOP page 3-B-1-7
27. Provide COAs in the form of broad targeting guidance to the JFACC	JTCB		USARCENT JTF HQ SOP page 3-B-1-7
28. Review the JFC's campaigns plan several days in advance and advise the JFC to anticipate future ops	JTCB		USARCENT JTF HQ SOP page 3-B-1-7
29. Coordinate and review targeting information	JTCB		USARCENT JTF HQ SOP pages 3-B-1-7 and 3-C-1-1
30. Provide targeting guidance and priorities	JTCB		USARCENT JTF HQ SOP pages 3-B-1-7 and 3-C-1-1
31. Recommend supplemental ROE	JTCB		USARCENT JTF HQ SOP page 3-B-1-7
32. Define the desired effects of joint fires	JTCB		USARCENT JTF HQ SOP page 3-B-1-7
33. Advise CJTF on: <ul style="list-style-type: none"> <li>• Target prioritization</li> <li>• ROE</li> <li>• Law of Armed Conflict</li> </ul>	JTCB		USARCENT JTF HQ SOP page 3-C-1-1
34. Review JFACC's JIPTL <ul style="list-style-type: none"> <li>•</li> </ul>	JTCB		USARCENT JTF HQ SOP page 3-C-1-1
35. Develop/maintain restricted target list/no fire areas (SJA)	JTCB		USARCENT JTF HQ SOP page 3-C-1-1
36. Assess adherence to CJTF priorities and guidance	JTCB		USARCENT JTF HQ SOP page 3-C-1-2
37. Review JFC's campaign plans several days in advance and act as an advisory board to anticipate future ops	JTCB		USPACOM JFACC SOP page 16
38. Provide forum for each component to review joint targeting guidance and apportionment	JTCB		USPACOM JFACC SOP page 16

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
39. Advise JFC on the plan to achieve overall theater aims and objectives	JTCB		USPACOM JFACC SOP page 16
40. Assist components in translating JFC obj and guidance into coordinated ops and plans	JTCB		USPACOM JFACC SOP page 16
41. Providing a means of synchronizing all joint fires	JTCB		USACOM SOP (DRAFT) Annex B par 4e(1)
42. Prevent duplication of effort in application of fires	JTCB		USACOM SOP (DRAFT) Annex B par 4e(1)
43. Provide a forum for each warfighting component to review joint targeting guidance and apportionment. Advise the CJTF on the plan to achieve overall theater aims and objectives.	JTCB		USACOM SOP (DRAFT) Annex C par 6d
44. Assist all components in translating CJTF objectives and guidance into coordinated component operations and plans	JTCB		USACOM SOP (DRAFT) Annex C par 6d
45. Based on JFC guidance and priorities, provide COAs in the form of broad targeting guidance to the JFACC	JTCB		USPACOM JFACC SOP page 16
46. Help the JFC: <ul style="list-style-type: none"> <li>• Coordinate lethal and nonlethal joint fires</li> <li>• Synchronize operational fires and maneuver with the JFC</li> <li>• Coordinate targeting information</li> <li>• Provide targeting guidance and priorities</li> <li>• Prepare and refine the JTL</li> <li>• Define the desired effects of joint fires</li> <li>• Recommend supplemental ROE</li> </ul>	JTCB		USPACOM JFACC SOP page 16
47. Prioritize component target category nominations and target sets within the categories, then transmit via the Fires and Maneuvers Message (FMM), a JIPTL	JTCB		USPACOM JFACC SOP page 9
48. Based on the CJTF guidance and priorities, provide courses of action in the form of broad targeting guidance to the components	JTCB		USACOM SOP (DRAFT) Annex C par 6d

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
49. With an operational level of war focus, review the CJTF's campaign plans several days in advance and act as an advisory board to the CJTF to anticipate future operations in his campaign plan	JTCB		USACOM SOP (DRAFT) Annex C par 6d
50. Reviews target information	JTCB		USACOM SOP (DRAFT) Annex C par 6d
51. Maintains a restricted (or prohibited) target list	JTCB		USACOM SOP (DRAFT) Annex C par 6d
52. JTCB meeting results should be provided to component and supporting forces. The JTCB Decisions Message may include; Apportionment, CAS Distribution, JIPTL, Targeting Guidance and Priorities. Additions and/or changes to no fire areas. Modifications to JTF targeting strategy, and summaries of daily BDA reports	JTCB		USACOM SOP (DRAFT) Annex C par 6d
53. The JTCB is a valuable vehicle to help the CJTF to: <ul style="list-style-type: none"> <li>• Coordinate targeting information</li> <li>• Develop targeting guidance and priorities</li> <li>• Define the desired effects of joint fires</li> <li>• Recommend supplemental ROE</li> </ul>	JTCB		USACOM SOP (DRAFT) Annex C par 6d
54. Assess adherence to CJTF priorities and guidance	JTCB		USACOM SOP (DRAFT) Annex C Appendix 1 par 3d(6)
55. Advise CJTF on target prioritization, Rules of Engagement (ROE), and Law of Armed Conflict	JTCB		USACOM SOP (DRAFT) Annex C Appendix 1 par 3d(1)
56. Principal forum for integrating fires in support of the JFC	JTCB		XVIII ABC JTF SOP page 4-1-1
57. Targeting for IW/C2W assets	JTCB		XVIII ABC JTF SOP page 4-1-3
58. Advise CJTF on overall theater targeting objectives	JTCB		XVIII ABC JTF SOP page 4-3-3

TASK	PRIMARY ASSIGNED AGENT	ALTERNATE ASSIGNED AGENT	SOURCE
59. Develop a targeting concept which supports the CJTF's intent and overall operational concept	JTCB		XVIII ABC JTF SOP page 4-3-3
60. Focus planning and execution out to 96 hrs; concurrently review and revise theater targeting framework which looks to ultimate obj which may be week away	JTCB		XVIII ABC JTF SOP page 4-3-4
61. Ensure component's targeting effort translates a coordinated and synchronized joint fires effort in pursuit of CJTF obj	JTCB		XVIII ABC JTF SOP page 4-3-4
62. Ensure recon and intel collection priorities are synchronized/support JTF targeting effort - provide link between JTF target intel and ops	JTCB		XVIII ABC JTF SOP page 4-3-4
63. Monitor evaluation of BDA	JTCB		XVIII ABC JTF SOP page 4-3-4
64. Recommend targeting guidance/priorities to CJTF	JTCB		XVIII ABC JTF SOP page 4-3-4
65. Review for concurrence/amendment the JFACC's recommended apportionment decision and proposed JIPTL	JTCB		XVIII ABC JTF SOP page 4-3-4
66. Initiate taskings to components to strike JIPTL targets not assigned to JFACC	JTCB		XVIII ABC JTF SOP page 4-3-5
67. Provide oversight for the JTF no-strike and protected target list	JTCB		XVIII ABC JTF SOP page 4-3-5
68. Ensure recommendations that require CJTF approval are published in an Apportionment, Decision, Allocation, and Targeting Guidance Daily message	JTCB	JFFC (implied)	XVIII ABC JTF SOP page 4-3-5
69. CINC's proponent for coordinating, deconflicting, and synchronizing deep ops	Combined Targeting Board (CTB)		Deep Ops Primer - Korea page 17

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
70. Oversee the entire synchronization and integration process - oversight of all combat ops for initial target development to execution <ul style="list-style-type: none"> <li>• Review CINCCFC guidance/intent</li> <li>• Review synch cell COAs and provide recommendations</li> <li>• Identify requirements of components</li> <li>• Issue instruction to Combined Targeting Cell</li> <li>• Evaluate and approve the SPITL</li> <li>• Develop the apportionment recommendation</li> <li>• Monitor development of the ITO</li> <li>• Provide the Combined Execution Cell Battle Director guidance pertaining to that day's air ops and obj</li> </ul>	Executive Board of CTB		Deep Ops Primer - Korea page 18
71. Prepare the SPITL	Combined Targeting Cell of CTB		Deep Ops Primer - Korea page 18
72. Provide admin support and recommendations to executive board	Combined Targeting Cell of CTB		Deep Ops Primer - Korea page 19
73. Keep ACC targeting linked to CINC's overall strategy - interface with CINC's BCWG <ul style="list-style-type: none"> <li>• Provide refined obj for next 3 days of war</li> <li>• Develop daily attack plan</li> <li>• Develop future attack plan</li> <li>• Provide rationale for daily apportionment recommendation</li> </ul>	Synchronization Cell of CTB		Deep Ops Primer - Korea page 19
74. Develop the integrated task order	Combined Planning Cell of CTB		Deep Ops Primer - Korea page 20
75. Supervision and execution of the current ITO	Combined Execution Cell of CTB		Deep Ops Primer - Korea page 21

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**APPENDIX D (Cont)**

**JOINT FIRES TASK-ASSIGNMENT MATRIX**  
**Part 5: JFACC**

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
1. Make recommendations to the establishing commander on the proper employment of the military capability made available to accomplish the assigned responsibilities	Functional Component Commander		JP 0-2 page IV-18
2. Plan, coordinate, allocate, task, and execute the JFC's air operations plan IAW JFC guidance, the apportionment directive and the JIPTL	JFACC		USPACOM JFACC SOP page 17
3. Identify, prioritize, and select enemy target sets for attack by air per JFC's guidance	JFACC		USPACOM JFACC SOP page 17
4. Recommend apportionment of the joint air effort to the JFC for approval/revision after consultation with the component commanders	JFACC		USPACOM JFACC SOP pages 4 and 17
5. Plan, coordinate, allocate, and task assigned sorties based on apportionment decision	JFACC		USPACOM JFACC SOP page 4
6. Quantify the expected results of lethal and nonlethal weapons employment against prioritized targets	JFACC		USPACOM JFACC SOP page 9
7. Weaponeer nominated targets: <ul style="list-style-type: none"> <li>• Target attack obj</li> <li>• target ID and description</li> <li>• Recommended #/type of weapons</li> <li>• Recommended delivery platform</li> <li>• Recommended aim points</li> <li>• Target area threats</li> <li>• Probability of destruction</li> </ul>	JFACC		USPACOM JFACC SOP page 9

TASK	PRIMARY ASSIGNED AGENT	ALTERNATE ASSIGNED AGENT	SOURCE
8. Develop the MAAP: <ul style="list-style-type: none"> <li>Review of JFC and JFACC guidance</li> <li>Support Plans and requests from components</li> <li>Update target requests</li> <li>Availability of forces</li> <li>Targets selected from the JIPTL</li> <li>A/C allocation</li> </ul>	JFACC		USPACOM JFACC SOP page 9
9. Evaluate results of air ops and provide to JFC for consolidation into overall evaluation of the campaign. Include: <ul style="list-style-type: none"> <li>BDA</li> <li>Munitions effectiveness assessment</li> <li>Reattack recommendations</li> </ul>	JFACC		USPACOM JFACC SOP page 11
10. Schedule TLAM/CALCM attacks on the ATO	JFACC		CCR 525-1 VOL I page III-3
11. Apportion air assets by the priority guidance provided in the JTCB	JFACC		CCR 525-1, VOL I page II-2
12. Plan, coordinate, allocate, and task joint air operations based on USCINCCENT's guidance decision	JFACC		CCR 525-1 VOL I, page II-2
13. Determine the appropriate system (fixed wing, TLAM, CALCM) to attack each target at JGAT meeting	JFACC		CCR 525-1 VOL I page III-3
14. Coordinate targets recommended for TLAM/CALCM attack with NAVCENT and CENTAF	JFACC		CCR 525-1 VOL I page III-3
15. Include preplanned helo and ATACMS sorties across the FSCL on the ATO	JFACC		CCR 525-1 VOL I page III-3
16. Ensure CINC's targeting guidance for TLAM/CALCMs is properly implemented at the JGAT	JFACC		CCR 525-1 VOL I page III-3
17. Process all potential targets through the JAOC to identify, prioritize, and select specific targets that meet the JFC's obj and guidance. IMPLIED - produce the JIPTL	JFACC		USARCENT JTF HQ SOP page 3-B-1-2

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
18. Produce the JIPTL and apportionment recommendation for CJTF approval	JFACC		USARCENT JTF HQ SOP page 3-B-1-7
19. Plan, coordinate, allocate, task, and direct the joint air effort in accordance with CJTF guidance and joint force objectives	JFACC		USACOM SOP (DRAFT) Annex C par 6f
20. Coordinate requests for target materials production	JFACC		USACOM SOP (DRAFT) Annex C par 6f
21. Develop a joint air operations plan derived from the CJTF's broader operation or campaign objectives and guidance regarding the roles, missions, tasks, and responsibilities of joint air capabilities/forces	JFACC		USACOM SOP (DRAFT) Annex C par 6f
22. After consulting with other component commanders, recommend apportionment of the joint air effort by percentage and/or by priority that should be devoted to various mission categories and/or to geographic areas	JFACC		USACOM SOP (DRAFT) Annex C par 6f
23. Translate air apportionment into allocation and develop targeting guidance into the joint ATO (which may include specific aim points)	JFACC		USACOM SOP (DRAFT) Annex C par 6f
24. Direct and ensure deconfliction of joint air operations	JFACC		USACOM SOP (DRAFT) Annex C par 6f
25. Synchronize joint air operations	JFACC		USACOM SOP (DRAFT) Annex C par 6f
26. Coordinate with the appropriate component's agencies/elements for synchronization and deconfliction with land and naval operations	JFACC		USACOM SOP (DRAFT) Annex C par 6f
27. Coordinate with the appropriate component's agencies/elements for tasking of the air capabilities/forces made available	JFACC		USACOM SOP (DRAFT) Annex C par 6f
28. Coordinate with the JFSOCC's SOLE for integration, synchronization, and deconfliction with special operations	JFACC		USACOM SOP (DRAFT) Annex C par 6f
29. Monitor execution and redirect joint air operations as required	JFACC		USACOM SOP (DRAFT) Annex C par 6f

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
30. Direct alert joint air capabilities/forces for prosecution of real-time targets in support of joint forces	JFACC		USACOM SOP (DRAFT) Annex C par 6f
31. Compile component target requirements, prioritize targets, based on CJTF guidance. Develop the Joint Integrated Prioritized Target List (JIPTL) for CJTF approval.	JFACC		USACOM SOP (DRAFT) Annex C par 6f
32. Provide bomb damage and combat assessments to the JTF J2 and J3	JFACC		USACOM SOP (DRAFT) Annex C par 6f
33. Process target nominations	JGAT		USACOM SOP (DRAFT) Annex C par 5
34. Compile the JIPTL	JGAT		USACOM SOP (DRAFT) Annex C par 5
35. Task sorties for air interdiction, counterair, theater reconnaissance, and those operating beyond other components' AOs	JFACC		XVIII ABC JTF SOP page 4-1-2
36. Recommend suitable TLAM targets	JFACC	JTCB	XVIII ABC JTF SOP page 4-1-3
37. Deconflict TLAM flight routes	JFACC		XVIII ABC JTF SOP page 4-1-3
38. Brief proposed JIPTL and apportionment recommendation to the JTCB	JFACC		XVIII ABC JTF SOP page 4-3-4
39. Recommend other components/agencies to strike targets	JFACC		XVIII ABC JTF SOP page 4-3-5
40. Coordinating Authority for all fires between the FSCL and DBSL	Commander, Air Component Command (CACC)		Deep Ops Primer - Korea page 10, 13
41. Compel agreement regarding ops beyond the DBSL, IAW CINC's priorities and intent	CACC		Deep Ops Primer - Korea page 10
42. Establish and operate the CTB to synchronize the application of combined combat power, prevent fratricide, and achieve success in deep ops	CACC		Deep Ops Primer - Korea page 13
43. Provide all-source intelligence, combat assessment, administrative, and logistical support to the CTB	CACC		Deep Ops Primer - Korea page 13
44. Consolidate, deconflict, prioritize, and nominate deep ops targets to CTB for inclusion in the SPITL and ITO	CACC		Deep Ops Primer - Korea page 13

TASK	PRIMARY ASSIGNED AGENT	ALTERNATE ASSIGNED AGENT	SOURCE
45. Develop an air apportionment recommendation in coordination with other component commanders, for CINC approval	CACC		Deep Ops Primer - Korea page 13

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**APPENDIX D (Cont)**

**JOINT FIRES TASK-ASSIGNMENT MATRIX**  
**Part 6: COMPONENTS**

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
1. Establish procedures and mechanisms to manage the targeting function	All Components		JP 3-0 page III-27
2. Identify and prioritize targets (nominate targets that are outside their boundaries or exceed the capabilities of organic and supporting assets (based on JFC's apportionment and subapportionment decisions))	Component Commanders		JP 3-0 page III-26
3. Conduct execution planning, based on JFC apportionment and targeting decisions, for assigned missions	Component Commanders		JP 3-0 page III-26
4. Adjust fire support coordinating measures consistent with the operational situation and in consultation with superior, subordinate, supporting, and affected commanders	Commanders		JP 3-0 page III-33
5. Inform all affected commanders of attacks beyond the FSCL to allow necessary reaction to avoid fratricide	Attacking Force		JP 3-0 page xiii
6. Establish FSCL	Land Force Commander		JP 3-0 page xiii
7. Control all fires short of the FSCL	Land Force Commander		JP 3-0 page xiii
8. Provide description of component air operations including DS missions to the JFACC	Components		USPACOM JFACC SOP page 17

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
9. Release the target information report via TGTINFOREP msg to recommend targets for addition to the JTL, nominate new targets for attack coordination/deconfliction, submit post strike assessment information, and report data changes to existing targets on the JTL	Components		USPACOM JFACC SOP page 20
10. Nominate targets for attack	Components, Functional Commanders, Targeting Elements		CCR 525-1 VOL I page III-3
11. Attack emerging targets using organic assets behind the FSCL and out to the limit of the land force boundary (Note: inform JFACC in sufficient time to allow coordination to avoid fratricide)	Appropriate Land Force Commander		CCR 525-1, VOL I, page III-1
12. Within each are, conduct operations and prioritization and attack of targets in consonance with the CINC's intent	Component Commanders		CCR 525-1, VOL I page III-1
13. Position and adjust fire support coordination measures consistent with the operational situation and in consultation with superior, subordinate, supporting, and affected commanders	Commanders		CCR 525-1 VOL I page III-1
14. Employ restrictive measures to enhance the protection of friendly forces operating beyond the FSCL	Commanders		CCR 525-1 VOL I page III-2
15. Recommend establishment of, location of, and duration of the FSCL to the JFLCC for approval	Deputy Joint Force Land Component Commander (DJFLCC)		CCR 525-1, VOL I, page III-1
16. Release a message detailing proposed FSCL changes - Call USCENTCOM to activate the proposed FSCL	DJFLCC		CCR 525-1 VOL I page III-2
17. Synchronize operations on either side of the FSCL out to the limits of the land force boundary	DJFLCC		CCR 525-1, VOL I, page III-1



TASK	PRIMARY ASSIGNED AGENT	ALTERNATE ASSIGNED AGENT	SOURCE
18. Brief JTCB on FSCL, boundaries, and other graphic changes recommendations	DJFLCC		CCR 525-1 VOL I page III-2
19. Tomahawk Strike Coordinator (TSC) and executive agent for TLAM planning	NAVCENT		CCR 525-1 VOL I page III-2,3
20. Conduct detailed execution planning, provide the JFACC ATO info, and promulgate launch sequence plans and INDIGO tasking messages	TSC (NAVCENT)		CCR 525-1 VOL I page III-3
21. CALCM executive agent for planning	CENTAF		CCR 525-1 VOL I page III-3
22. Provide input to JTCB for integration into the JTL at JFACC	Components		CCR 525-24 page 3-4
23. Provide input to the JFACC for daily apportionment recommendation	Components		USACOM SOP (DRAFT) Annex C par 6e
24. Identify requirements and nominate targets to the CJTF and JFACC as appropriate. Nominations may be via TGTINFOREP	Components		USACOM SOP (DRAFT) Annex C par 6e
25. Conduct execution planning	Components		USACOM SOP (DRAFT) Annex C par 6e
26. Recommend priorities for BDA to the CJTF collection requirements to the J2	Components		USACOM SOP (DRAFT) Annex C par 6e
27. Task attack helicopters, ATACMS, or TLAMs	Component Commander	CJTF	XVIII ABC JTF SOP page 4-1-2
28. Task S-S missiles	Component Commander	JFFC/ JTCB	XVIII ABC JTF SOP page 4-1-3
29. Task Army/USMC attack A/C	Component Commanders	CJTF	XVIII ABC JTF SOP page 4-1-3
30. Consolidate, deconflict, prioritize, and nominate deep ops targets for inclusion in the SPITL and ITO	Components		Deep Ops Primer - Korea page 14-16
31. Provide O-6 rep to executive board of CTB and element to CTB for synchronization of air, land, UW, and sea ops	Components		Deep Ops Primer - Korea page 14-16

<b>TASK</b>	<b>PRIMARY ASSIGNED AGENT</b>	<b>ALTERNATE ASSIGNED AGENT</b>	<b>SOURCE</b>
32. Control fires and air operations between the FEBA and FSCL	Commander, Ground Component Command (CGCC)		Deep Ops Primer - Korea page 10
33. Coordinate establishment of FSCMs and boundaries with ACC via the BCE	CGCC		Deep Ops Primer - Korea page 14
34. Inform ACC of organic fires against emerging targets between the FSCL and DBSL	CGCC Combined Marine Forces Command		Deep Ops Primer - Korea page 14, 16
35. Inform CGCC prior to initiating NSFS between the FSCL and DBSL	Commander, Naval Component Command		Deep Ops Primer - Korea page 15

## **APPENDIX E**

### **JULLS ENTRIES**

UNCLASSIFIED

1. (U) JULLS NUMBER: 30654-38876 (**00087**), submitted by C3IC-GROUND, MAJ CAPPS.
2. (U) Operation DESERT SHIELD/STORM conducted by USCENTCOM on 03/07/91.
3. (U) KEYWORDS: AIR APPORTIONMENT/ALLOCAT, AIR WARFARE, ANGLICO (AIR NGF LN CO), ATO (AIR TASKING ORDER), C2 (COMMAND AND CONTROL), DESERT, DESERT STORM, FIRE SUPPORT, FORCE STRUCTURE, INTELLIGENCE, INTEROPERABILITY, JCS (JOINT CHIEFS OF STF), JOINT PLANNING, LAND WARFARE, LIAISON, NAVAL GUNFIRE, NAVAL WARFARE, OPERATIONS, ORDERS/GUIDANCE, REPORTING, RWO (REAL WORLD OPS), TARGETING, UNIFIED COMMAND, UNITED STATES, USAF (US AIR FORCE), USCENTCOM, USMC (US MARINE CORPS), USN (US NAVY).
4. (U) TITLE: U.S. PROVIDED COALITION DEEP OPERATIONS AND DEEP TARGETING.
5. (U) OBSERVATION: UNITED STATES CENTRAL COMMAND (USCENTCOM) WAS REQUIRED TO SUPPORT COALITION DEEP OPERATIONS AND TARGETING.
6. (U) DISCUSSION:
  - A. (U) DEEP OPERATIONS REQUIRE INTELLIGENCE COLLECTION ASSETS TO FIND TARGETS, DOCTRINE WHICH EXPLAINS WHICH TARGETS TO ENGAGE, AND LONG-RANGE WEAPON SYSTEMS TO ATTACK THE TARGETS. THE COALITION ALLIES HAD NONE OF THESE. CENTCOM PROVIDED ASSISTANCE TO COALITION ALLIES IN THE FOLLOWING THREE AREAS.
    - (1). (U) AT CORPS LEVEL, THE ARCENT LIAISON TEAMS AND MARINE CORPS AIR NAVAL GUNFIRE LIAISON COMPANY (ANGLICO) TEAMS ASSISTED THE CORPS STAFF IN TARGET PLANNING, TO INCLUDE OBTAINING AND PROCESSING THE NECESSARY INTELLIGENCE.
    - (2). (U) A REPRESENTATIVE OF THE COALITION COORDINATION, COMMUNICATION, AND INTEGRATION CENTER (C3IC) ATTENDED THE DAILY TARGET ALLOCATION MEETINGS TO ENSURE COALITION REQUIREMENTS WERE CONSIDERED.

(3). (U) COALITION REQUIREMENTS WERE ULTIMATELY INCORPORATED INTO THE THEATER AIR CAMPAIGN THROUGH INCLUSION IN THE AIR TASKING ORDER (ATO).

B. (U) IN COMBINED OPERATIONS, THE US CANNOT ASSUME THAT ALLIES WILL UNDERSTAND HOW TARGETS ARE CHOSEN AND THE IMPORTANCE OF EFFECTIVE LIAISON IN THE AIR APPORTIONMENT/ALLOCATION PROCESS. THE BATTLEFIELD COORDINATION ELEMENT (BCE) OR EQUIVALENT AGENCY MUST BE PREPARED TO AGGRESSIVELY SEEK INFORMATION ON ALLIED PLANS AND REPRESENT ALLIED COMMANDS IN THE ALLOCATION PROCESS.

7. (U) LESSON LEARNED: OUR COALITION PARTNERS POSSESSED NEITHER THE EQUIPMENT, FORCE STRUCTURE, NOR DOCTRINE TO CONDUCT DEEP OPERATIONS, TO INCLUDE DEEP TARGETING.

8. (U) RECOMMENDED ACTION:

A. (U) THAT UNIFIED COMMANDS BE PREPARED TO ASSIST FUTURE COALITION PARTNERS IN DEEP OPERATIONS AND TARGETING, TO INCLUDE TASKING THE COMPONENTS TO PROVIDE THE REQUIRED SUPPORT TO COALITION PARTNERS.

B. (U) THAT LIAISON TEAMS, DISPATCHED TO COALITION FORCES' HEADQUARTERS, BE GIVEN THE MISSION TO ASSIST THAT HEADQUARTERS IN CONDUCTING DEEP OPERATIONS AND IN PLANNING DEEP TARGETS.

C. (U) THAT COALITION FORCES' DOCTRINE AND CAPABILITIES BE CONSIDERED WHEN ASSIGNING MISSIONS AND AREAS OF RESPONSIBILITIES.

D. (U) THAT THE CENTCOM COALITION WARFARE ELEMENT BE TASKED TO MONITOR THE AIR ALLOCATION.

9. (U) COMMENTS: OUR ALLIES' PERCEPTION THAT THEY ARE INVOLVED IN THIS PROCESS AND THAT THEY ARE RECEIVING THEIR "FAIR SHARE" OF AVAILABLE AIR IS AS IMPORTANT AS THEIR ACTUAL RECEIVING OF THE NECESSARY SUPPORT. OUR COALITION PARTNERS PLACED THEIR AIR FORCES INTO THE JOINT FORCES AIR COMPONENT COMMAND POT AND PERCEIVED THAT AIR SUPPORT WAS EQUITABLY ALLOCATED. THIS PERCEPTION PLAYED A PART IN THE SUCCESS OF THE COALITION.

1. (U) JULLS NUMBER: 13779-30200 (00090), submitted by CCJ3-OG, LTCOL MCABEE, 968-6228, (813)830-6229.
2. (U) Operation DESERT SHIELD/STORM conducted by USCENTCOM on 03/08/91.
3. (U) KEYWORDS: AIR STRIKE, AIR WARFARE, AVIATION, C2 (COMMAND AND CONTROL), DESERT, DESERT SHIELD/STORM, DTTP (DOC, TAC, TECH, PR), EQUIPMENT TYPE, FIRE SUPPORT, HELICOPTER, JCS (JOINT CHIEFS OF STF), LAND WARFARE, LIAISON, MACRO12, NIGHT, OPERATIONAL TASKS, OPERATIONS, OPSEC (OPS SECURITY), REPORTING, RWO (REAL WORLD OPS), UNIFIED COMMAND, USCENTCOM.
4. (U) TITLE: Fratricide.
5. (U) OBSERVATION: Technology and associated weapons standoff distances significantly increase the probability of fratricide on the modern battlefield. This is particularly true of air delivered munitions--especially at night, and ground delivered munitions at extreme ranges of over 2000 meters. While fratricide was the second largest killer on the Desert Storm Battlefield, it would have been the greatest if coalition forces had not adopted a wide variety of procedures and devices to assist in identifying friendly forces.
6. (U) DISCUSSION:
  - a. Anti-fratricide standing operating procedures must be in place prior to hostilities. The most important preventative is the clear delineation and rigid compliance with doctrinal fire support coordination measures, particularly the fire support coordination line (FSCL). Commanders at all levels must insure that their forces comply with the appropriate restrictions, particularly the requirement to coordinate every air strike short of the FSCL with the ground commander. In addition to doctrinal control measures, USCENTCOM instituted the following friend or foe verification measures for coalition forces.
    - (1) A coalition-wide vehicle identification system--an inverted "V" on the sides, rear, and top of all tactical vehicles. Where possible, each leg of the inverted "V" was 24 inches in length by 5 inches wide with each leg separated by 12 inches. The inverted "V" on top had its apex toward the front of the vehicle. Color used contrasted sharply with its background.
    - (2) A coalition-wide identification system to distinguish coalition Puma and Gazelle helicopter from Iraqi Hip, Gazelle, Alouette, and BO-105 helicopters (three white stripes 15 cm wide and 20 cm apart on the tail boom; three white stripes 15 cm wide and 20 cm apart, perpendicular to line of flight, on the belly; and one vertical stripe 15 cm wide and 70 cm long on the nose). To enhance OPSEC, markings were not applied until G minus three.
    - (3) Ground-to-ground day. Gun tubes oriented toward the enemy; inverted "V".

(4) Ground-to-ground night. Thermal inverted "V"; yellow chem lights; sign/countersign from light source.

(5) Air-to-ground night. Thermal inverted "V".

b. The following additional measures successfully reduced the opportunities for fratricide on a coalition battlefield.

(1) Exchange of liaison officers throughout the coalition.

(2) Combined training (pre-hostilities) to improve recognition between adjacent units with vehicles of different manufacture.

(3) A numerical sign/countersign personal recognition between adjacent units with vehicles of different manufacture.

7. (U) LESSON LEARNED: Anti-fratricide measures must be simple, easily recognizable, in place (coalition wide) prior to hostilities, and rigidly enforced.

8. (U) RECOMMENDED ACTION:

a. Warfighting CINCs must establish anti-fratricide measures in their peacetime operation SOPs and all wartime orders.

b. Pursue R&D initiative for battlefield ID, friend or foe (IFF) that can be quickly installed on any piece of US or Allied equipment, are compatible with OPSEC requirements, and meet the needs of advanced weapons standoff distances.

c. Standardize anti-fratricide doctrine service wide.

9. (U) COMMENT: None.

1. (U) JULLS NUMBER: 13781-46200 (00091), submitted by CCJ3-OG, LTCOL MCABEE, 968-6228, (813)830-6229.
2. (U) Operation DESERT SHIELD/STORM conducted by USCENTCOM on 03/09/91.
3. (U) KEYWORDS: AI (AIR INTERDICTION), AIR WARFARE, C2 (COMMAND AND CONTROL), DESERT, DESERT SHIELD/STORM, DTP (DOC, TAC, TECH, PR), EXERCISE DESIGN, EXERCISE PLANNING, FIRE SUPPORT, JCS (JOINT CHIEFS OF STAFF), JCS PUB 1, LAND WARFARE, OPERATIONS, REPORTING, RWO (REAL WORLD OPS), UNIFIED COMMAND, USAF (US AIR FORCE), USCENTCOM.
4. (U) TITLE: Interdiction Responsibilities and Coordination.
5. (U) OBSERVATION: Mutually agreed upon procedures for coordinating interdiction did not exist. Components viewed their responsibilities differently and from a functional perspective. These differences caused unnecessary confusion and wasted effort.
6. (U) DISCUSSION:
  - a. The central issue was defining the area where the ground component responsibilities ended and where the air component responsibilities began. In essence, the two perspectives were:
    - (1) The Ground Component. Responsible (coordinating authority) within the component area of influence.
    - (2) The Air component. Responsible (coordinating authority) for the entire Area of Operations beyond the Fire Support Coordination Line (FSCL).
  - b. Responsibilities for coordinating interdiction are not clearly defined in joint doctrine and are interpreted differently. Clearly, the purpose of the FSCL is to facilitate the delivery of fires beyond it - - it must not be used for any other purpose.
  - c. Both ground and air components share responsibilities for coordinating separate parts of the total interdiction effort. Each component's area of responsibility is a function of enemy, mission and component capability - - delineation of responsibilities cannot be tied to an existing coordination or control measure. The point where the ground commander ceases to be the coordinating authority for interdiction, and where the air commander assumes it, is dynamic and must be defined by the Joint Force Commander. This delineation of responsibility should be graphically portrayed by a coordination measure serving no other purpose.
7. (U) LESSON LEARNED: The CINC must address and define interdiction responsibilities during campaign planning. Responsibilities are based on the mission, enemy, and component

capabilities. An existing coordination or control measure cannot be used effectively to delineate component responsibility.

8. (U) RECOMMENDED ACTION:

- a. Component interdiction responsibilities should be specifically addressed in joint doctrine and practiced during peacetime training exercises.
- b. Establish (and include in JCS Pub 1) a new coordination measure that has but one purpose - - the delineation of component responsibilities for coordinating interdiction.

9. (U) COMMENT: None



1. (U) JULLS NUMBER: 31149-32000 (**00093**), submitted by CCJ3-OG, LTCOL MCABEE, 968-6228, (813)830-6229.
2. (U) Operation DESERT SHIELD/STORM conducted by USCENTCOM on 03/12/91.
3. (U) KEYWORDS: AI (AIR INTERDICTION), AIR WARFARE, C2 (COMMAND AND CONTROL), CAS (CLOSE AIR SUPPORT), DESERT, DESERT SHIELD/STORM, DTTP (DOC, TAC, TECH, PR), EXERCISE DESIGN, EXERCISE PLANNING, FIRE SUPPORT, INTELLIGENCE, JCS (JOINT CHIEFS OF STAFF), LAND WARFARE, OPERATIONS, ORDERS/GUIDANCE, REPORTING, RWO (REAL WORLD OPS), TARGETING, UNIFIED COMMAND, USA (US ARMY), USAF (US AIR FORCE), USCENTCOM.
4. (U) TITLE: Targeting.
5. (U) OBSERVATION: The CINC's role in the targeting process is not clearly defined in joint doctrine and was often misunderstood. This lack of understanding/definition caused confusion and duplication of targeting effort.
6. (U) DISCUSSION:
  - a. The CINC has the key role in the theater-level targeting/interdiction process. However, this role is not clearly defined in joint doctrine nor is it adequately emphasized in joint exercises.
  - b. To ensure unity of effort and to maintain integrity of the force, the CINC performs the following targeting/interdiction tasks:
    - (1) Designates a Joint Forces Air Component Commander (JFACC) and assigns his responsibilities.
    - (2) Assigns missions, redirects efforts, and directs coordination among his component commanders.
    - (3) Issues fire support guidance.
    - (4) Designates and tasks forces for interdiction.
    - (5) Establishes campaign objectives and provides to his subordinate commanders the means necessary to achieve those objectives.
    - (6) Approves the prioritized attack of targets.
    - (7) Distributes Close Air Support (CAS) to all components (if the CINC is also the Land Component Commander).

- c. In all the above, the CINC receives recommendations from his JFACC, Component Commanders, and staff.
- 7. (U) LESSON LEARNED: The CINC's role in the theater targeting/interdiction process is crucial and must be understood prior to hostilities.
- 8. (U) RECOMMENDED ACTION: The CINC's role in targeting/interdiction should be specifically addressed in joint doctrine and practiced during peacetime training exercises.
- 9. (U) COMMENT: None.

1. (U) JULLS NUMBER: 13356-80100 (**00120**), submitted by G-3, DEEP OPNS, MAJ COMBS, 572-4024, (404)752-4024.
2. (U) Operation DESERT SHIELD conducted by USCENTCOM on 03/01/91.
3. (U) KEYWORDS: C2 (COMMAND AND CONTROL), DESERT, DESERT SHIELD, DTTP (DOC, TAC, TECH, PR), FIRE SUPPORT, FM 101-5-1, INTELLIGENCE, JCS (JOINT CHIEFS OF STF), LAND WARFARE, OPERATIONS, REPORTING, RWO (REAL WORLD OPS), TARGETING, UNIFIED COMMAND, USA (US ARMY), USCENTCOM, USMC (US MARINE CORPS).
4. (U) TITLE: FIRES BEYOND FIRE SUPPORT COORDINATION LINES (FSCLs) AND ACROSS BOUNDARIES.
5. (U) OBSERVATION: During Operations DESERT SHIELD/STORM there were doctrinal differences between USA and USMC over the authority to fire across a boundary beyond the FSCL.
6. (U) DISCUSSION: During Operation DESERT SHIELD/STORM there were differences between USMC and USA interpretation of the authority to fire across a boundary beyond a FSCL. The USA definition of a boundary (FM 101-5-1) clearly states that "indirect fires may be fired across a boundary after prior coordination." The Joint Pub 1-02 dated 1 Dec 89 only refers to a boundary as "a line by which areas of responsibility between adjacent units/formations are defined." The Joint Pub does not refer to direct or indirect fires. The Joint Pub's definition of FSCL clearly states that "supporting elements may attack targets forward of the FSCL, without prior coordination, provided the attack will not produce adverse surface effects on, or to the rear of the line." The USA (FM 101-5-1) definition of FSCL uses the same terminology. "Supporting elements" was interpreted by USA to mean subordinate elements, for example; a corps FSCL could be fired beyond by all subordinate corps elements, irrespective of boundaries, but could not be fired beyond by an adjacent unit not subordinate to the corps. The USMC doctrine interprets the FCSL as an authority to fire beyond the FSCL, irrespective of boundaries, without further coordination.
7. (U) LESSON LEARNED: A clear understanding of doctrinal terms is an absolute must for joint/coalition operations.
8. (U) RECOMMENDED ACTION: Redefine boundary in Joint Pub 1-02 to read:

BOUNDARY - A CONTROL MEASURE NORMALLY DRAWN ALONG IDENTIFIABLE TERRAIN FEATURES AND USED TO DELINEATE AREAS OF TACTICAL RESPONSIBILITY FOR SUBORDINATE UNITS. WITHIN THEIR BOUNDARIES, UNITS MAY MANEUVER WITHIN THE OVERALL PLAN WITHOUT CLOSE COORDINATION WITH NEIGHBORING UNITS UNLESS OTHERWISE RESTRICTED. DIRECT FIRE MAY BE PLACED ACROSS BOUNDARIES ON CLEARLY IDENTIFIED ENEMY TARGETS

WITHOUT PRIOR COORDINATION, PROVIDED FRIENDLY FORCES ARE NOT ENDANGERED. INDIRECT FIRE ALSO MAY BE USED AFTER PRIOR COORDINATION.

9. (U) COMMENT: None.

1. (U) JULLS NUMBER: 51538-69539 (**00192**), submitted by SOCLNO, LTCOL PAYNE, 968-6253, (813)830-6253.
2. (U) Operation DESERT SHIELD/STORM conducted by USCENTCOM on 05/15/91.
3. (U) KEYWORDS: C2 (COMMAND AND CONTROL), DESERT, DESERT SHIELD/STORM, FIRE SUPPORT, JCS (JOINT CHIEFS OF STF), JOINT PLANNING, LAND WARFARE, NFA (NO FIRE AREA), OPERATIONS, PLANS AND POLICY, REPORTING, RWO (REAL WORLD OPS), UNIFIED COMMAND, USCENTCOM.
4. (U) TITLE: NO JOINT DEFINITION FOR RFA/NFA.
5. (U) OBSERVATION: A joint definition for "Restricted Fire Area (RFA)" and "No Fire Area (NFA)" does not exist and is required.
6. (U) DISCUSSION: The terms "RFA and NFA" were used interchangeably as restrictive fire measures. While there were no major problems encountered, components have their own definition/interpretation of RFA /NFA that could ultimately have endangered personnel during operations.
7. (U) LESSON LEARNED: There were no major problems, but confusion did exist as to which was the correct term to use.
8. (U) RECOMMENDED ACTION: JCS publish joint definitions of appropriate terms necessary for fire support coordination and control.
9. (U) COMMENTS: None

1. (U) JULLS NUMBER: 62710-24300 (**00626**), submitted by JTF-BRAVO.
2. (U) Operation PROVIDE COMFORT conducted by USEUCOM on 06/27/91.
3. (U) KEYWORDS: PROVIDE COMFORT, RWO (REAL WORLD OPS), USA (US ARMY), JCS (JOINT CHIEFS OF STF), JTF (JOINT TASK FORCE), C2 (COMMAND AND CONTROL), REPORTING, OPERATIONS, LAND WARFARE, AVIATION, FIRE SUPPORT, JOINT TRAINING, EQUIPMENT TYPE, AH-64 HELICOPTER, HELICOPTER.
4. (U) TITLE: SYNCHRONIZATION OF MANEUVER FORCES.
5. (U) OBSERVATION: Joint Task Force (JTF)-Bravo did not adequately synchronize maneuver forces for combat operations. This was most obvious in the integration of combat aviation assets into the maneuver plan. The aviation brigade planned battle positions throughout the Tactical Area of Responsibility. These battle positions were never coordinated with ground maneuver forces. The lack of any fire support elements at the JTF also precluded the synchronization of indirect fires with ground maneuver forces' and CAS aircraft.
6. (U) DISCUSSION: During operations, on one occasion, AH-64s showed up in a ground maneuver sector, without coordination, while ground forces were firing illumination. The downing of an aircraft could have been the result. During planning of the Dihok forces entry operation, combat aviation battle positions were not properly coordinated with ground maneuver units.
7. (U) LESSON LEARNED: All fires and maneuvers must be coordinated at the JTF level.
8. (U) RECOMMENDED ACTION: Always plan for combat aviation as a maneuver element. Conduct detailed backbriefs of plans with all maneuver elements present and participating.
9. (U) COMMENTS:

1. (U) JULLS NUMBER: 62715-65900 (**00628**), submitted by JTF-BRAVO.
2. (U) Operation PROVIDE COMFORT conducted by USEUCOM on 06/27/91.
3. (U) KEYWORDS: PROVIDE COMFORT, RWO (REAL WORLD OPS), USA (US ARMY), USAF (US AIR FORCE), USN (US NAVY), USMC (US MARINE CORPS), JCS (JOINT CHIEFS OF STF), MEU (MAR EXPED UNIT), C2 (COMMAND AND CONTROL), REPORTING, STAFF FUNCTIONS, OPERATIONS, AIR WARFARE, LAND WARFARE, AVIATION, FIRE SUPPORT, NAVAL WARFARE, JOINT PLANNING, EQUIPMENT TYPE, HELICOPTER, ARTILLERY, ATTACK HELICOPTER.
4. (U) TITLE: Combined Task Force (CTF) Fire Support Coordination.
5. (U) OBSERVATION: The Joint/CTF did not have a fire support element (FSE) to integrate the fire from multiple assets.
6. (U) DISCUSSION: During OPERATION PROVIDE COMFORT, numerous fire support assets were brought together. These included British, US Marine and US Army artillery, mortar, attack helicopter, Air Force and naval air assets. The C/JTF did not have any means of coordinating these assets. 24 MEU, the largest headquarters, was not equipped to integrate other units into their organization. The only standing headquarters capable of currently providing this function is the Allied Mobile Force (AMF(L)) Artillery Headquarters based in Bulford, England. They routinely train with multinational forces although they currently do not train with attack helicopters. They have the capability to handle multiple fire support assets with little augmentation.
7. (U) LESSON LEARNED: There must be a fully staffed brigade and division FSE at C/JTF.
8. (U) RECOMMENDED ACTION: Establish an FSE at the C/JTF level during all future contingency operations.
9. (U) COMMENTS:

1. (U) JULLS NUMBER: 52120-92447 (**01258**), submitted by CJTF FSE, MAJ SHADBURN, 353-6981.
2. (U) Exercise COBRA GOLD 92 conducted by CINCPAC on 05/04/92.
3. (U) KEYWORDS: AGENDA, CJTB, COBRA GOLD 92, FTX (FIELD TRAINING EXER), JTF (JOINT TASK FORCE), C2 (COMMAND AND CONTROL), ORDERS/GUIDANCE, PLANS, INTELLIGENCE, TARGETING, OPERATIONS, AIR WARFARE, AIR APPORTIONMENT/ALLOCAT, LAND WARFARE, FIRE SUPPORT, DTTP (DOC, TAC, TECH, PR), JTB (JT TARGETING BOARD).
4. (U) TITLE: CJTB AGENDA.
5. (U) OBSERVATION: The Combined Joint Targeting Board (CJTB) meeting agenda was critical to timely publication of prioritized target lists.
6. (U) DISCUSSION: There was a three hour window to conduct a CJTB meeting and prepare a targeting briefing to COMCJTF. The meeting length needed to be as short as possible. This was accomplished with rigid adherence to the following agenda.
  - a. C-3 general guidance
  - b. Projected Situation: 48-72 hours out
    - C-2: Enemy Situation
    - C-3: Future Plans: Commander's intent and concept of the operation
  - c. Fire Support: Priorities and fire support coordination measures
  - d. C-2: Intelligence Preparation of the Battlefield (IPB) and Battle Damage Assessment (BDA) update.
  - e. Attack Guidance Matrix
  - f. Develop Prioritized Target List
    - C-2: Present high value targets (HVT).
    - Identify high payoff targets (HPT).
    - Include component requirements
7. (U) LESSON LEARNED: Following a CJTB meeting agenda is critical to timely publishing of a prioritized target list.
8. (U) RECOMMENDED ACTION: Continue to use the same agenda.
9. (U) COMMENTS: POC CAPT SHIGLEY, CJTF FSE, DSN 622-7876.



1. (U) JULLS NUMBER: 81237-06600 (**02815**), submitted by CJTFTT92, MAJ D YAUCH, 477-1551, (808)477-1551.
2. (U) No type TANDEM THRUST 92 conducted by on 07/24/92.
3. (U) KEYWORDS: TANDEM THRUST 92, USAF (US AIR FORCE), JTF (JOINT TASK FORCE), ORDERS/GUIDANCE, STAFF FUNCTIONS, FSC (FIRE SPT CRDINATOR), INTELLIGENCE, TARGETING, LAND WARFARE, FIRE SUPPORT, INTEROPERABILITY, JOINT PLANNING, EXERCISE DESIGN, DIRECTIVES, EXERCISE PLANNING, SOP (STANDING OP PROC).
4. (U) TITLE: REQUIREMENT FOR JTCB SOP MANUAL.
5. (U) OBSERVATION: Prospective JTF Commanders need more detailed guidance on the conduct of the Joint Targeting Coordination Board (JTCB).
6. (U) DISCUSSION: There was no written instruction or guidance for COMTHIRDFLEET staff to refer to during exercise planning or to use while conducting the TANDEM THRUST 92 JTCB. At Startex, the JTCB was unsure of its roles, responsibilities, required products, level of effort, timelines, or coordination requirements. Much was left up to the JFACC and AFFOR representatives. A detailed JTCB Standard Operating Procedures manual needs to be developed in the Joint community for use by those JTF commanders who are expected/required to conduct JTCBs. The SOP needs to include examples of the procedures, inputs to the JTCB, and timelines. Coordination requirements/procedures with agencies outside the JTF (JFACC, BCE, Fire Support Coordinator, TLAM planners/targeteers, etc) as well as inside the JTF (Joint Planning Cell, Current Operations Cell, Intelligence Cell, etc) need to be addressed.
7. (U) LESSON LEARNED: Joint instructions need to be provided to operational commanders who are assigned those joint responsibilities not normally conducted (JTCB).
8. (U) RECOMMENDED ACTION: USCINCPAC/J30/0 develop JTCB Standard Operating Procedures manual in coordination with the Joint Staff and other Unified CINCs, and issue to prospective JTF commanders.
9. (U) COMMENTS: COMTHIRDFLEET acted as CJTF during Exercise TANDEM THRUST 92.

1. (U) JULLS NUMBER: 72378-13080 (02939), submitted by JCS J7 EAD, Col Sylling, 225-6292, (703)695-6292.
2. (U) Exercise TANDEM THRUST 93 conducted by USCINCPAC on 07/15/93.
3. (U) KEYWORDS: FTX (FIELD TRAINING EXER), UNIFIED COMMAND, C2 (COMMAND AND CONTROL), CAS (CRISIS ACTION SYS), ORDERS/GUIDANCE, STAFF FUNCTIONS, TANDEM TRHSUT 93, JOINT TARGETING COORD BRD, JTCB, JOINT TASK FORCE, JTF, TARGETING, AIR WARFARE, TANDEM THRUST 93, JTF (JOINT TASK FORCE), INTELLIGENCE, INTEROPERABILITY, JOINT PLANNING, DTTP (DOC, TAC, TECH, PR).
4. (U) TITLE: JTF Staffs Must Focus on the Operational Level of War.
5. (U) OBSERVATION: CTF planners need to stay focused on the operational level of war.
6. (U) DISCUSSION: The Joint Targeting Coordination Board (JTCB) and the JTF made no attempts to determine operational centers of gravity. They concentrated their targeting efforts on specific target sets and operational target categories, but they did not identify an operational center of gravity which would have served to focus their targeting efforts.
7. (U) LESSON LEARNED: Operational planners--the CJTF and JTCB--should focus on the operational level of war.
8. (U) RECOMMENDED ACTION:
9. (U) COMMENTS: (72378-13080)

1. (U) JULLS NUMBER: 72308-30621 (**02943**), submitted by JCS J7 EAD, CDR MARINER, 225-, (703)695-6292.
2. (U) FTX TANDEM THRUST 93 conducted by USCINCPAC on 07/15/93.
3. (U) KEYWORDS: FTX (FIELD TRAINING EXER), UNIFIED COMMAND, TARGETING, OPERATIONS, AIR WARFARE, AIR APPORTIONMENT/ALLOCAT, TANDEM THRUST 93, JFACC, JTCB, JOINT TASK FORCE, JTF, USAF (US AIR FORCE), USPACOM, JTF (JOINT TASK FORCE), C2 (COMMAND AND CONTROL), LIAISON, ORDERS/GUIDANCE, FLAGSHIP, INTELLIGENCE, NAVAL WARFARE, SURFACE, DTTP (DOC, TAC, TECH, PR), ATO (AIR TASKING ORDER), USLANTCOM, J2, J3.
4. (U) TITLE: JTCB Process With Both Collocated JFACC Afloat and Separate JFACC Ashore.
5. (U) OBSERVATION: The Joint Targeting Coordination Board (JTCB) utilized during Exercise Tandem Thrust 93 gradually evolved from essentially a staff operation during the planning and "show of force" phase, while the JFACC was embarked aboard the JTF flagship, to a fully functioning board chaired by the Deputy JTF after the JFACC moved ashore. This transition to a senior level board, with either component commanders or very senior representatives sitting at the table along with the JTF J3, not only enhanced the clarity of apportionment guidance provided by the CJTF and its dissemination, but was essential when the air component commander/JFACC was no longer collocated.
6. (U) DISCUSSION: USCINCLANT and USCINCPAC signed a JFACC Concept of Operations in January 1993 outlining both the JFACC and JTCB responsibilities and functions. This document identified the membership of the JTCB as the J2, J3, J5, component commanders (including the JFACC) and chaired by the Deputy Joint Force Commander. The purpose of the JTCB is to recommend apportionment guidance and target priorities for approval by CJTF for the ATO cycle. However, early in the exercise, the JTF Tandem Thrust JTCB was organized as both a Joint Targeting Coordination Cell (JTCC) chaired by a JTCB Executive Director. Towards the end of the exercise, the JTCB had essentially merged with the CJTF Operations Executive Group (OEG) which consisted of all the CJTF J-heads and service component liaison officers.
7. (U) LESSON LEARNED: The JTCB needs to provide clear recommendations to the CJTF. The JTCB should consist of senior officers who can speak for their components and commands. The JTCB should be chaired by a senior officer such as the Deputy CJTF.
8. (U) RECOMMENDED ACTION:
9. (U) COMMENTS: (72308-30621)

1. (U) JULLS NUMBER: 92436-71176 (**03363**), submitted by USSOUTHAF, MAJ CRAWFORD, 361-5188, (602)750-5188.
  2. (U) Exercise FUERTES DEFENSAS 93 conducted by USSOUTHCOM on 12/08/93.
  3. (U) KEYWORDS: FIRE SUPPORT ELEMENT, TARGETING, FUERTES DEFENSAS 93, FTX (FIELD TRAINING EXER), USA (US ARMY), UNIFIED COMMAND, USSOUTHCOM, JTF (JOINT TASK FORCE), HONDURAS, ORDERS/GUIDANCE, OPERATIONS, AIR WARFARE, CAS (CLOSE AIR SUPPORT), FORWARD AIR CONTROLLER, LAND WARFARE, FIRE SUPPORT, SOF (SPECIAL OPS FORCES), JOINT PLANNING, EXERCISE DESIGN, EXERCISE PLANNING, EQUIPMENT TYPE, A-10 AIRCRAFT, AC-130 AIRCRAFT, ARTILLERY.
  4. (U) TITLE: No Fire Support Element (FSE) at JTF.
  5. (U) OBSERVATION: Lack of a FSE inhibited the targeting process for the exercise.
  6. (U) DISCUSSION: The FSE at Corps/Division level is responsible for:
    - A. Planning and coordination fire support
    - B. Developing the Fire Support Plan
    - C. Maintaining current status of all fire support capabilities.
    - D. Recommending target priorities for fire support.
- This element is critical even in a Close Air Support (CAS) war with aircraft under close control of a forward air controller. All preplanned Army targets need to be passed to the BCE for informational purposes and to act as a back up to avoid fratricide. Additionally, if the 82d ABN had exercised in Honduras, an element would have been necessary to deconflict live artillery missions, AC130 missions, and A10 missions in the exercise impact area as originally planned. Flooding in the area caused cancellation of planned live fire missions.
7. (U) LESSON LEARNED: FSE is a must, especially for FTXs involving live fire missions.
  8. (U) RECOMMENDED ACTION: Establish a FSE in future USSOUTHCOM exercises as applicable.
  9. (U) COMMENTS: (91454-67398)

1. (U) JULLS NUMBER: 42835-33100 (**04209**), submitted by COMAFFOR TB94-1, MAJ BUTTON.
2. (U) CPX TEMPO BRAVE 94-1 conducted by USCINCPAC on 04/25/94.
3. (U) KEYWORDS: TARGETING, CPX (COMMAND POST EXER), TEMPO BRAVE 94-1, USCINCPAC, USPACOM, JFACC, JTL, AIR WARFARE, CAS (CLOSE AIR SUPPORT), OAS (OFFENSIVE AIR SPT), AIR APPORTIONMENT/ALLOCAT, CONPLAN (CONTINGENCY PLN).
4. (U) TITLE: JOINT TARGET LIST (JTL) PROCEDURES.
5. (U) OBSERVATION: JTL procedures are extremely cumbersome, redundant, and do not allow the JFACC planning staff the necessary flexibility to apply combat air power effectively and efficiently to meet the commander's objectives.
6. (U) DISCUSSION: TB 94-1, like previous exercises TANDEM THRUST 92, 93, and COBRA GOLD 93, had no baseline JTL published until after the AFFOR had begun the ATO planning cycle. This is because under the CINC's two-tiered warfighting concept of operations, Component Staffs are required to submit daily target nominations to the Joint Targeting Coordination Board (JTCB) for inclusion on the JTL. However, components can't do that until they receive Courses of Action guidance from CJTF. This process also makes for duplication of effort at the component-level inevitable and forces the staff supporting the JTCB into a long process of deconflicting each nomination list, submitting them for approval and disseminating the JTL. To exacerbate the planning problem during the execution phase, CJTF AOOA guidance to the components was not published in conjunction with the JTL. This delayed the next day's ATO selection process. Average time turnaround for JFACC target nominations was in excess of 24 hours, making the process unresponsive in a dynamic targeting environment. The requirement to get pre-approval for each target in an adversary country was cumbersome.
7. (U) LESSON LEARNED: None.
8. (U) RECOMMENDED ACTION: The target nomination process, in our view, deserves another look. We believe the JTCB should publish a list which outlines categories of targets approved for attack (vice individual targets). This would allow JFACC planners the flexibility necessary to conduct efficient and effective combat air operations in support of the CJTF. This would also minimize the necessity to ask for exceptions to attack individual targets (within an approved category) when the situation changes (i.e., enemy task group which deploys to an obscure port which was never nominated to the JTL). Restrictions to individual targets or target categories could be published/updated every six hours or by exception. Finally, initial targeting guidance should be disseminated as early as possible and in as much detail as possible to allow for the long ATO planning cycle.
9. (U) COMMENTS: PACAF: This is doctrinal issue and deserves a close look at USCINCPAC and Joint Staff to see if guidance/clarification of the process should be issued.

1. (U) JULLS NUMBER: 00966-96598 (**04228**), submitted by JTF 180 18 ABC, CPT LEWIS, 236-8338, (910)396-8338.
2. (U) Operation UPHOLD DEMOCRACY conducted by USACOM on 09/19/94.
3. (U) KEYWORDS: UPHOLD DEMOCRACY, RWO (REAL WORLD OPS), USAF (US AIR FORCE), USMC (US MARINE CORPS), JTF (JOINT TASK FORCE), MAGTF (MAR AIR GND TF), C2 (COMMAND AND CONTROL), AIRSPACE MANAGEMENT, ORDERS/GUIDANCE, OPORD (OPERATIONS ORDER), AIR WARFARE, LAND WARFARE, FIRE SUPPORT, NAVAL WARFARE, AMPHIBIOUS, ATF (AMPHIB TASK FORCE), DTTP (DOC, TAC, TECH, PR), JOA (JT OPERATIONS AREA), NFA (NO FIRE AREA).
4. (U) TITLE: Fire Support Coordination Measures (FSCMs).
5. (U) OBSERVATION: Surface components of JTF 180 established restrictive FSCMs, some with duplicative numbering, but did not disseminate throughout the joint force.
6. (U) DISCUSSION:
  - a. (U) JTF 180 established NFAs #1 through #6 in Appendix 14 to Annex C to CJTF 180 OPORD 2370-95 (Fire Support). During all the rehearsals, the J3 fires coordinator stated that additional NFAs would be numbered sequentially so that no duplication would occur. Subsequently, with the execution of OPORD 2380+, JTF 180 promulgated NFAs #7 and #8 by FRAGO at the recommendation of the Joint Force Fires Coordinator (JFFC). JTF 190 established NFAs by FRAGO beginning with #9. At the same time, CTF 185.3 (Special Marine Air Ground Task Force (SPMAGTF)/Commander Landing Force (CLF)) established NFAs in the Cap Haitian area beginning with #1. As a result, more than one NFA in the joint operations area was identified by the same number.
  - b. (U) Furthermore, CTF 185.3 did not disseminate NFA information through CTF 185 to JTF 180. Therefore, CTF 186/Air Forces (AFFOR) was not aware of these NFAs. In other circumstances, this could have led to fratricide; however, in this operation, the establishment of an amphibious operations area (AOA) for CTF 185.2 Commander Amphibious Task Force (CATF) in which CTF 185.3 then operated did preclude that possibility since he had total control over operations in the AOA and only employed his own assets during the critical entry phase of operations.
  - c. (U) Notwithstanding, FSCMs must be fully disseminated to all concerned up, down and laterally throughout a joint task force. Dissemination to the supporting air component, or JFACC, is particularly important. The JFACC will publish applicable FSCMs and air coordination measures in the airspace coordination order.

7. (U) LESSON LEARNED: FSCMs must be disseminated through both maneuver and fire support channels to all concerned levels. This includes higher, lower and adjacent commands.
8. (U) RECOMMENDED ACTION: Incorporate issue in joint and service doctrine, and in component standing operating procedures.
9. (U) COMMENTS: (00966-96598)

1. (U) JULLS NUMBER: 51234-06512 (**04282**), submitted by JTF 140, SSGT Sheffield, 484-1605, (910)451-1605.
2. (U) FTX AGILE PROVIDER 94 conducted by USACOM on 05/11/94.
3. (U) KEYWORDS: FTX (FIELD TRAINING EXER), C2 (COMMAND AND CONTROL), ORDERS/GUIDANCE, INTELLIGENCE, TARGETING, FIRE SUPPORT, JFACC, GRAPHICS, JOINT PLANNING.
4. (U) TITLE: Coordinate Conversion.
5. OBSERVATION: Components used different horizontal datum resulting in incorrect coordinate conversion.
6. DISCUSSION: Fire support coordination measures (FSCM) initial dissemination was in UTM grids using North American Datum-27. The JFACC converted these grids to latitude/longitude coordinates using North American Datum-83. The resulting incorrect locations appeared in the ATO. This would be a major problem in a "real world" situation.
7. LESSON LEARNED: All components must use common horizontal datum when converting UTM grids to latitude/longitude.
8. RECOMMENDED ACTION: The JTF Commander's Operations Order should designate a standard datum. Most large-scale military maps use North American Datum-27, so that is the practical solution.
9. COMMENTS: (51234-06512)



1. (U) JULLS NUMBER: 61327-45802 (**04316**), submitted by CJTF CG/1ST MAW, LT QUIGLEY, 622-9591.
2. (U) Exercise COBRA GOLD 94 conducted by USCINCPAC on 06/13/94.
3. (U) KEYWORDS: COBRA GOLD 94, CG94, USCINCPAC, USPACOM, JFACC, TAOR, FTX (FIELD TRAINING EXER), USA (US ARMY), USAF (US AIR FORCE), USN (US NAVY), USMC (US MARINE CORPS), UNIFIED COMMAND, C2 (COMMAND AND CONTROL), AIRSPACE MANAGEMENT, AIR WARFARE, JCS PUBLICATIONS, SERVICE PUBLICATIONS, INTEROPERABILITY, JOINT PLANNING, JOINT TRAINING, DTP (DOC, TAC, TECH, PR), EXERCISE DESIGN, SCENARIO.
4. (U) TITLE: AIRSPACE MANAGEMENT IN THE JOINT EXERCISE.
5. (U) OBSERVATION: PROCEDURES AND DOCTRINE FOR THE MANAGEMENT OF AIRSPACE AND FIRE SUPPORT CONTROL MEASURES IN A JOINT EXERCISE WITH A JFACC MUST BE REVIEWED AND STANDARDIZED.
6. (U) DISCUSSION: THE USAF CONTINUES TO PROVIDE THE JFACC FOR JOINT EXERCISES. THIS RESULTS IN THE JFACC PERSONNEL OFTEN TRYING TO UTILIZE AIR FORCE DOCTRINE IN THE ACCOMPLISHMENT OF THEIR MISSION. THE SITUATION LEADS TO THE MISTAKEN BELIEF THAT THE JFACC OWNED ALL AIRSPACE FORWARD OF THE FSCL. NO PROVISION WAS MADE FOR THE MARINE COMMANDER'S "DEEP BATTLE" OR THE MACG CONTROL OF MARINE AIR AND THE AIRSPACE ABOVE THE TAOR. WITH A SUBORDINATE GROUND COMMANDER ESTABLISHING THE FSCL, THE MEF COMMANDER IS FACED WITH THE TASK OF CREATING A BOUNDARY SHORT OF WHICH HE CAN EFFECT REACTIVE FIRES AND EMPLOY ORGANIC FIXED WING ASSETS TO SHAPE HIS BATTLEFIELD, BEYOND WHICH THE JFACC CAN STRIKE TARGETS UNENCUMBERED. WHETHER THIS LINE IS CALLED THE DEEP BATTLE SYNCHRONIZATION LINE (DBSL) OR SOME OTHER TERM, THE CAPABILITY TO SHIFT IN ACCORDANCE WITH THE DYNAMICS OF THE GROUND BATTLE MUST BE A PREREQUISITE. THE REQUIREMENT FOR SUCH A CONTROL MEASURE BECAME IMMEDIATELY EVIDENT AS THE PLANNING PROCESS MATURED DURING THE EXERCISE.
7. (U) LESSON LEARNED: PROVISIONS FOR AIRSPACE MANAGEMENT AND AIRSPACE CONTROL MEASURES MUST BE THOROUGHLY ADDRESSED AT PLANNING CONFERENCES. THIS MUST BE TRUE FOR CPX PLAY AS WELL AS REAL WORLD ISSUES.
8. (U) RECOMMENDED ACTION: PLANNING CONFERENCES MUST ADDRESS THE ISSUE OF AIRSPACE MANAGEMENT WITHIN THE AOR AND THE SPECIFIC NEEDS ASSIGNED FORCES WILL HAVE IN MANAGING AND SHAPING THE BATTLE WITHIN THEIR ASSIGNED TAOR'S. CONSIDERATION MUST BE GIVEN TO THE CHANGING NATURE OF THE BATTLEFIELD OVER TIME.

9. (U) COMMENTS: USCINCPAC J31: Concur with the comment that there is a need to be able to employ Marine Air in support of the maneuver commander beyond the FSCL. The problem lies with the structured ACO/SPINS controlled airspace beyond the FSCL. JP 356.1 and JFACC CONOPS address this issue. The consensus is that any close air support aircraft not on the ATO lines (i.e. Marine Air) MUST adhere to the ATO/SPINS procedures. If the aircraft are conducting operations IAW ACO/SPINS, they will be unhindered by the JFACC and there should not be a problem. AWACS would also be monitoring the area and Marine Air should be following ACO IFF procedures.

J38: The answer is present in Joint Doctrine (not Air Force or any other Service): Joint Pub 0-2, Joint Pub 3.56.1, and JFACC CONOPS.

RAP PM: The exercise scenario contributed to this "doctrinal issue". First, placing units forward of a FSCL (in this case, a Marine division with Air Wing and other Supporting Arms) complicates fire support coordination to the point of making a FSCL useless. Obviously, employing any supporting arm past this particular FSCL would have to be coordinated with the forces occupying the terrain.

Second, The JFACC apparently possessed Airspace Control Authority and was the Area Air Defense Commander as the JFC had not assigned these responsibilities to anyone else. Given this situation, the Marine division operating in a TAOR (TAORs are no longer applicable. Refer to JP 0-2. "Only commanders of Combatant Commands are assigned Areas of Responsibility", everyone else receive "Areas of Operations") have complete control of only its Air Wing not made available to the Joint Task Force on the ATO. Even those air assets under the direct control of the Marine division should be on the Joint ATO or ACO/SPINS to prosecute missions in support of the Marine division. (See JP 3-56.1)

PACAF: The scenario was a major contributor to this problem. Adhering to Joint Doctrine and a clear understanding of the roles and responsibilities of the JFACC should eliminate problems of this nature. In this exercise, the JFACC did not use "Air Force" doctrine as alluded to in this JULL; rather, the JFACC used a combination of the JFACC CONOPS and Joint Pubs Doctrine.

This lesson illustrates the importance of prior planning and coordination and staying with Joint Doctrine when positioning boundaries/Operating Areas, Fire Support Coordination Measures, and assigning roles/responsibilities in a Joint Environment.

13TH AF/DO: While Air Force doctrine may not always agree with USMC doctrine in the area of Fire Support Coordination measures, we must adhere to Joint Doctrine in Joint Opns. We used Joint Doctrine to establish fire support and airspace control measures with ARFOR without problems. MARFOR, as one of two Ground Components and having a "TAOR" of over 100,000 sq mi., reliance on Joint Doctrine was essential.

IAW Joint Pub 3-56.1, the JFACC was tasked to support the JFC's objectives. A huge TAOR with restrictive MARFOR- controlled airspace control measures and nearly 85% of the MARFOR available aircraft sorties withheld as direct support hampered support of the JFC's objectives.

The JFACC, from any service component, must rely on joint doctrine and must be given the authority to employ air power for the benefit of the joint force as a whole. Restrictions on the JFACC's ability to perform his assigned duties as Airspace Control Authority and Area Air Defense Commander seemed contrary to joint doctrine, including JCS Pub 1-02. The interaction missions, with some expectations, should be a part of the joint air effort and under JFACC control/tasking authority. Prior planning and coordination of boundaries, operating areas, and missions is essential in any operation. When we enter into the planning and execution stages of joint and combined exercises and contingencies, we must focus on our mission and we must come to the fight ready to work in concert with sister service and coalition partners toward that single unifying mission.

1. (U) JULLS NUMBER: 52650-03613 (**04333**), submitted by CTF-146(12 AF), MAJ D. BUCK, 361-5188, (602)750-5188.
2. (U) FTX AGILE PROVIDER 94 conducted by CINCUSACOM on 04/21/94.
3. (U) KEYWORDS: C2 (COMMAND AND CONTROL), OPERATIONS.
4. (U) TITLE: Shared Tomahawk Release Authority.
5. (U) OBSERVATION: Tomahawk release authority, shared by the Commander Joint Task Force (CJTF), and the Joint Force Air Component Commander (JFACC), was not clearly defined.
6. (U) DISCUSSION: CJTF retained full Tomahawk release authority and delegated limited release authority to JFACC; however, there were not clear lines of authority between the two commanders.
7. (U) LESSON LEARNED: The relationship should be clearly defined at the beginning of an exercise or real world contingency. Details of shared release authority should cover all aspects of JFACC tasking authority including: Air Tasking Order (ATO) preplanned launches, alert launches, and emergent launches.
8. (U) RECOMMENDED ACTION: The following is recommended when CJTF retains Tomahawk releases authority and limited authority is delegated to JFACC:
  - a. Normal Launches-CJTF delegates limited release authority to JFACC via the Joint Targeting Coordination Board (JTCB) approved target list JFACC may direct a launch against only those targets approved by the JTCB (approved Joint Integrated Prioritized Target List (JIPTL). JFACC directs launch via the ATO.
  - b. Emergent Launches (not on ATO)-JFACC may direct launch against emergent targets after authorization is received from CJTF via the command net or hard copy message.
  - c. Alert Launches-JFACC may initiate launch for a mission fragged as ALERT (2 hour notice) on the ATO.
9. (U) COMMENTS:(52650-03613) None.

1. (U) JULLS NUMBER: 52942-99990 (**04470**), submitted by CJTF J-3, MAJ KEN WATSON, 622-7899.
2. (U) Exercise COBRA GOLD 94 conducted by USCINCPAC on 05/19/94.
3. (U) KEYWORDS: COBRA GOLD 94BDA, CG94, USCINCPAC, USPACOM, TARGETING, JDISS, DWAN, FTX (FIELD TRAINING EXER), UNIFIED COMMAND, INFORMATION MANAGEMENT, OPERATIONS CENTER, STAFF FUNCTIONS, INTELLIGENCE, AIR WARFARE, JCS PUBLICATIONS, JOINT TRAINING, DTPP (DOC, TAC, TECH, PR).
4. (U) TITLE: BDA DISSEMINATION.
5. (U) OBSERVATION: DURING THE EXERCISE, BDA DISSEMINATION AMONG J2, J3, AND THE C2W CELL WAS HIT OR MISS. THE J2 RECEIVED BDA REPORTS VIA BOTH JOINT DEPLOYABLE INTELLIGENCE SUPPORT SYSTEM (JDISS) AND THE DEPLOYABLE WIDE-AREA NETWORK (DWAN). NOT ALL BDA REPORTS WERE IN BOTH PATHS, AND VERY FEW BDA REPORTS WERE READDRESSSED TO USERS OUTSIDE THE J2. THE J2 USED BDA TO BRIEF ALL THOSE THAT NEEDED THE INFORMATION, BUT OTHERS (THAT NEEDED RAW BDA) DID NOT ALWAYS RECEIVE IT. ON ONE OCCASION, A BDA REPORT WAS SENT DIRECTLY TO THE C2W CELL IN THE J3 WITHOUT ALSO FORWARDING TO THE J2.
6. (U) DISCUSSION: BDA, ESPECIALLY CONCERNING STRUCK EW, GCI, AND C2 NODE SITES IS CRITICAL TO THE COUNTER-C2 TARGETING PROCESS. J2 ANALYSIS OF THE BDA IS ALSO IMPORTANT TO THE COUNTER-C2 EFFORT. CLOSE COORDINATION IS REQUIRED AMONG THE J2, J3, AND THE C2W CELL TO SHARE BDA INFORMATION.
7. (U) LESSON LEARNED: USERS OF RAW BDA MUST BE IDENTIFIED BEFORE AND EXERCISE OR OPERATION, AND PROCEDURES ESTABLISHED TO ENSURE DISSEMINATION TO THEM. TIMELY CROSS-NOTIFICATION OF ANY INTELLIGENCE OR COMBAT INFORMATION MUST BE REQUIRED BY BOTH J2 AND J3 PERSONNEL.
8. (U) RECOMMENDED ACTION: C2W AND J2 STAFFS DEVELOP A LIST OF THOSE THAT NEED RAW BDA, AND DEVELOP AN ADDRESSEE LIST FOR INCORPORATION INTO JDISS, DWAN, AND ALL OTHER NETWORK ADDRESS GROUPS.
9. (U) COMMENTS: USCINCPAC J2: The PACOM Tactics, Techniques and Procedures (PTTP) for intelligence support to Joint Operations Manual specifies who should receive first and second phase BDA and by what means. For each contingency or mission, requirements may vary and should be identified by the CJTF or CFC as appropriate. J2 will review and modify PTTP guidance and BDA dissemination lists as required. J38: The JTF must Develop a PLAN for collection, dissemination, and use of BDA using what guidance is available. They are

ultimately responsible. J315: J2 focuses on providing BDA to the JTF staff. The units below the JTF still suffer from lack of BDA. A "BDA bulletin Board" where units can "pull" current BDA from the JTF level would provide the necessary BDA Dissemination. The TRAP broadcast provides a good "push" dissemination system, but units must wait until the broadcast to receive current BDA. If they could "pull" the BDA when they need it to plan missions, they will be more flexible. Another method to obtain Electronic Order of Battle BDA is by having the NSA monitor the ATO and initial BDA to verify emitters such as radars have been taken off the air and/or whether they come back up on the air. J311: Concur with lesson.

1. (U) JULLS NUMBER: 51144-34744 (**04653**), submitted by JTF 140, COL W. Darner, 484-8792, (910)451-8792.
2. (U) FTX AGILE PROVIDER 94 conducted by USACOM on 05/11/94.
3. (U) KEYWORDS: FTX (FIELD TRAINING EXER), C2 (COMMAND AND CONTROL), COMMAND RELATIONSHIPS, STAFF FUNCTIONS, FIRE SUPPORT, JCS PUBLICATIONS, JOINT PLANNING, DTTP (DOC, TAC, TECH, PR).
4. (U) TITLE: Joint Force Fires Coordinator (JFFC).
5. OBSERVATION: The role and functions of the Joint Force Fires Coordinator (JFFC) in the targeting process were not clear throughout the exercise.
6. DISCUSSION: During the Joint Guidance, Apportionment and Targeting (JGAT) team meetings, the Joint Force Fires Coordinator (JFFC) participated in the target nomination process with the other components. The question arose about what priority JFFC-nominated targets should receive, i.e. higher or lower than component-nominated targets. The collective body decided that JFFC targets would have to compete equally with the other component-nominated targets for inclusion on the Joint Integrated Prioritized Target List (JIPTL). Due to ignorance about the JFFC concept of operations and mission, confusion and a perception of duplicity regarding its function prevailed. There were no JFFC documents or SOPs explaining its function available for JGAT members. Although the JTF-140 OPOD briefly discussed the JFFC, much greater detail was necessary to facilitate synergistic operations. Members of the JGAT did appreciate the JFFC'S ability to bridge the JTF commander's intent and guidance into the targeting guidance that focused the participants' efforts in developing the JIPTL. The JFFC-crafted guidance was succinct and ensured unity of effort among all components.
7. LESSON LEARNED: The JFACC staff must understand the concept and functioning of the JFFC with regard to the targeting process. The JFFC's SOPs and concept papers are necessary for educating all participants prior to the exercise on JTF, JTCB, JFFC and JFACC relationships.
8. RECOMMENDED ACTION: Provide the incoming JFACC staff with the JFFC's and other SOPs prior to startup. Ensure JFFC roles and functions are clearly understood by key JFACC personnel prior to the exercise through "dry-run" role-playing.
9. COMMENTS: (51144-34744)

1. (U) JULLS NUMBER: 51152-83651 (04654), submitted by JTF 140, COL W. Darner, 484-8792, (910)451-8792.
2. (U) FTX AGILE PROVIDER 94 conducted by USACOM on 05/11/94.
3. (U) KEYWORDS: FTX (FIELD TRAINING EXER), UNIFIED COMMAND, OPERATIONS CENTER, STAFF FUNCTIONS, JOINT TRAINING, C2 (COMMAND AND CONTROL), AIRSPACE MANAGEMENT, TARGETING, AIR WARFARE, JFACC.
4. (U) TITLE: Target and Airspace Coordination Across Component Boundaries.
5. OBSERVATION: Coordination requirements for striking targets in adjacent ground component's Area of Responsibility (AOR) require study.
6. DISCUSSION: During the JFACC target planning cycle and execution of an ATO, numerous questions arose regarding the procedures for one component's nominating and striking targets in another component's Area of Responsibility (AOR). Although fire support doctrine is clear regarding the responsibilities of each component for his AOR, components were confused about airspace coordination and clearance, and what role JFACC played in the issue. The confusion caused some delays in executing attacks on "pop-up" targets during the operation. When components are concerned about air targets located in another ground component's AOR that could impact on their scheme of maneuver, those target nominations for planning can be coordinated between liaison officers directly during the Joint Guidance, Apportionment and Targeting (JGAT) process. If a cross-boundary target becomes known during execution of an ATO, a component can coordinate directly with the other component's appropriate agency (FCE, Force Fires Coordination Center) and JFACC to obtain permission and work the airspace coordination necessary to attack air targets across boundary. Additionally, airspace coordination can occur between the appropriate component agencies (ASC and MTACC) and JFACC to prevent fratricide. JFACC and JFFC should be informed of these missions for possible AWACS coordination and deconfliction. JFACC may recommend other means available to address the target to effect desired results.
7. LESSON LEARNED: Coordination to attack targets, and specifically air targets, can be effected through direct liaison between components. For "pop-up" targets, direct coordination with JFACC and the other component can facilitate rapid approval and response to the emergent threat. Reinforcement of this process at all component levels is crucial to ensuring timely execution. The basic process to solve the issue is addressed in various joint and service publications.
8. RECOMMENDED ACTION: Continue to reinforce the lesson of direct liaison between components to coordinate requirements for striking targets in an adjacent ground component's AOR.
9. COMMENTS: (51152-83651)



1. (U) JULLS NUMBER: 51153-58657 (**04655**), submitted by JTF 140, MAJ Kolditz, 635-7185.
2. (U) FTX AGILE PROVIDER 94 conducted by USACOM on 05/11/94.
3. (U) KEYWORDS: FTX (FIELD TRAINING EXER), AIR WARFARE, LAND WARFARE, JOINT TRAINING, SCENARIO, BATTLE DAMAGE ASSESSMENT, TARGETING.
4. (U) TITLE: JTF Assessment Function.
5. OBSERVATION: Battle Damage Assessment (BDA) at Surface-to-Surface Missile (SSM) sites was critical to synchronization in the Joint Task Force (JTF) plan.
6. DISCUSSION: If destruction of a target is a "Go/No-Go" criterion for a component, then the target is of JTF concern. Targeting procedures should ensure such targets are assessed as soon as possible to both preserve the momentum of the attack and prevent lack of synchronization in the overall JTF plan.
7. LESSON LEARNED: The targeting process must highlight those key targets of interest to the CJTF, and not merely prioritize and adjudicate component requests.
8. RECOMMENDED ACTION: Have the J2/G2 brief such a list of targets at each Joint Targeting Coordination Board (JTCB). J3/G3 should recommend a specific COA (such as a component mission to assess) for each target.
9. COMMENTS: (51153-58657)

1. (U) JULLS NUMBER: 11240-81500 (05492), submitted by COMSEVENTHFLT, CDR KNIGHT, 243-6379.
2. (U) Exercise TANDEM THRUST 95 conducted by USCINCPAC on 11/26/94.
3. (U) KEYWORDS: TANDEM THRUST 95, USAF (US AIR FORCE), JTF (JOINT TASK FORCE), INFORMATION MANAGEMENT, STAFF FUNCTIONS, FSC (FIRE SPT CRDINATOR), TARGETING, OOB (ORDER OF BATTLE), LAND WARFARE, FIRE SUPPORT, JOINT PUB 3-09, FTX (FIELD TRAINING EXER), USCINCPAC, JOINT DOCTRINE, USPACOM, TT95, DTTP (DOC, TAC, TECH, PR).
4. (U) TITLE: FIRE SUPPORT COORDINATOR - JOINT FORCE AIR COMPONENT COMMANDER.
5. (U) OBSERVATION: CJTF TANDEM THRUST designated JFACC as Force Fires Coordinator.
6. (U) DISCUSSION: While Joint Pub 3-09 recommends that a JTCB function as a Joint Force Fires Coordinator (JFFC); in small, regional conflicts (such as islands) with a limited target data base and restrained geography, JFACC may be the best agency to assign as the JFFC. This designation must be dependent on (among others) the overall forces assigned, campaign objectives and Order of Battle. In those cases where there is adequate Blue Air to prosecute the majority of known targets and geographically limited land warfare, the JFACC will be in the best position to allocate resources to targets and deconflict targets/forces.
7. (U) LESSON LEARNED: That JFACC can function as Joint Force Fires Coordinator under certain scenarios.
8. (U) RECOMMENDED ACTION: Use JFACC as the JFFC in operations with a limited Joint Operations Area and potential targets.
9. (U) COMMENTS: NOTED ITEM.

1. (U) JULLS NUMBER: 62661-61975 (**05877**), submitted by USACOM J72, LCDR Hardesty, 564-8635, (804)444-8635.
2. (U) CPX UNIFIED ENDEAVOR 95 conducted by USACOM on 04/20/95.
3. (U) KEYWORDS: UNIFIED ENDEAVOR 95, CPX (COMMAND POST EXER), JTF(JOINT TASK FORCE), C2 (COMMAND AND CONTROL), LIAISON, ORDERS/GUIDANCE, INTELLIGENCE, TARGETING, JIC (JT INTEL CTR), OPERATIONS, AIR WARFARE, AIR APPORTIONMENT/ALLOCAT, OPERATIONAL TASKS, EW (ELECTRONIC WARFARE), OPSEC (OPS SECURITY), J3, DTTP (DOC, TAC, TECH, PR), ATO (AIR TASKING ORDER), C2W.
4. (U) TITLE: C2W Integration In JTF Targeting Cycle.
5. (U) OBSERVATION: JTF 780 used their C2W Cell to effectively integrate all C2W related physical destruction requirements into the JTF targeting process.
6. (U) DISCUSSION: The JTF 780 C2W Cell coordinated on a daily basis with the OPSEC Officer, Deception Officer, JPOTF, and EW Officer to consolidate C2W related targets for physical destruction or placement on the protected target list. The targeting officer (O-3) in the C2W Cell ensured C2W targets were consolidated with other daily J3 target nominations made by the JTF to the JFACC and monitored their progress at the JFACC's JGAT meeting. The JTF C2W Officer (O-5) maintained cognizance of these nominations and attended the Joint Targeting Coordination Board (JTCCB) to ensure that the C2W effort was supported by the apportionment recommendation and macro level C2W concerns were addressed in CJTF guidance. The C2W targeting officer tracked targeting inputs compared to C2W targets that made the ATO, noting differences for potential current day mission re-roles or inclusion on later target nominations. The C2W targeting officer also conducted frequent direct liaison in the Joint Intelligence center. Battle Damage Assessment (BDA) on C2W targets was monitored through the JIC BDA officer, while close coordination with national intelligence support team (NIST) was maintained to verify changes developing in the adversary's C2 structure. Additional liaison with the JIC RFI manager helped track C2W and related requests for information (RFIs) to ensure a comprehensive C2W intelligence picture was maintained.
7. (U) LESSON LEARNED: Aggressive coordination by the C2W Cell can ensure that C2W physical destruction target nominations and protected targets are fully integrated into the JTF targeting process.
8. (U) RECOMMENDED ACTION: Utilize the C2W Cell as the medium for consolidating and incorporating physical destruction and protected target nominations from the four other C2W elements into the JTF targeting process. Employ at least one officer from the C2W cell, the C2W targeting officer, on a full time basis to coordinate and monitor C2W targeting inputs within the JTF operations/intelligence targeting cycle.
9. (U) COMMENTS (62661-61975): None.

1. (U) JULLS NUMBER: 62732-47266 (**05879**), submitted by USACOM J72, LCDR Hardesty, 564-8635, (804)444-8635.
2. (U) CPX UNIFIED ENDEAVOR 95 conducted by USACOM on 04/20/95.
3. (U) KEYWORDS: UNIFIED ENDEAVOR 95, CPX (COMMAND POST EXER), JTF (JOINT TASK FORCE), STAFF FUNCTIONS, MANPOWER & PERSONNEL, PUBLIC AFFAIRS, TARGETING, J2, OPERATIONS, OPERATIONAL TASKS, EW (ELECTRONIC WARFARE), OPSEC (OPS SECURITY), PSYOPS (PSYCHOLOGICAL OP), J3, J6, JOINT PUB 3-51, DTP (DOC, TAC, TECH, PR), C2W.
4. (U) TITLE: JTF C2W Organization.
5. (U) OBSERVATION: During Unified Endeavor 95, JTF 780's C2W organization consisted of a "core" C2W Cell consisting of the C2W Officer (O-5), EW Officer (O-5), Deception Officer (O-4), OPSEC Officer (O-3), C2W Targeting Officer (O-3), Asst EW Officer (O-3), and two EW NCOs (E-6/7). This group performed extensive coordination with the JTF J2, J6, JPOTF, Public Affairs Office, Staff Judge Advocate, Joint Forces Fires Coordinator (staff function within the J3), Joint Targeting Coordination Board, and Operations Planning Group to synergize C2W efforts within the JTF staff.
6. (U) DISCUSSION: JTF 780's "core" C2W Cell centralized OPSEC, Deception, and EW personnel under the C2W officer. This arrangement led to a highly coordinated, synergistic planning effort in these areas. Because of the broader PSYOP mission, a JPOTF was formed which was in no way subordinate to the C2W Officer. However, the PSYOP effort was closely coordinated with the "core" C2W Cell both at daily meetings and numerous informal discussions throughout the day. The C2W Cell also ensured that a representative of the Public Affairs Office was included in the daily meeting and other necessary discussions to deconflict potential C2W actions with Public Affairs initiatives. J2 and J6 personnel attended the daily C2W meetings and performed required coordination to provide support to the C2W effort. One of the functions of the larger C2W Cell meeting was consolidation of physical destruction target and protection nominations by all elements of C2W so the C2W Officer and C2W Targeting Officer could ensure that they were incorporated in the JTF targeting process. Of note, the "core" C2W Cell absorbed oversight of all functions listed for the Joint Commander's Electronic Warfare Staff (JCEWS) in Joint Pub 3-51. The consolidation of C2W and JCEWS functions took advantage of the overlap in manning and coordination requirements between the two organizations to reduce the number of required meetings and increase integration in planning. There were no observed flaws in this combination of functions.
7. (U) LESSON LEARNED: Use of a "core" C2W Cell containing OPSEC, Deception, and EW personnel working directly for the C2W Officer, who then reported to the J3, appeared to be a very viable method of organizing to synergize C2W activities. Using this organization, the C2W Officer was able to closely monitor all aspects of C2W and provide required direction to keep C2W activities moving forward and synchronized. The key to the success of this method of

organization was close and continuous coordination by "core" C2W Cell members with other elements of the JTF staff and components.

8. (U) RECOMMENDED ACTION: Consider modification of joint doctrine to allow for the combining of C2W Cell and JCEWS responsibilities when deemed appropriate by the JTF Commander.

9. (U) COMMENTS (62732-47266): None.

1. (U) JULLS NUMBER: 50950-60911 (**05899**), submitted by CG II MEF, MAJ Brown, 484-8531, (910)451-8531.
2. (U) CPX UNIFIED ENDEAVOR 95 conducted by CINCUSACOM on 04/24/95.
3. (U) KEYWORDS: UNIFIED ENDEAVOR 95, CPX (COMMAND POST EXER), JTF(JOINT TASK FORCE), OPERATIONS, AIR WARFARE, LAND WARFARE, FIRE SUPPORT.
4. (U) TITLE: Fire Support Coordination Procedures.
5. (U) OBSERVATION: The application of the FSCL was inefficient.
6. (U) DISCUSSION: During the exercise there was much discussion at both the JTF and JTF component levels on the application of the Fire Support Coordination Line (FSCL). Joint doctrine allows much interpretation on the efficient use of the FSCL. To be an effective tool, the FSCL must not be employed as a means to geographically view the battlefield but rather as a tool to effectively employ the vast fire support capability available to the joint commander. The use of the FSCL in conjunction with other fire support measures (i.e. target engagement zone short of the FSCL) ensures that joint fire support is integrated efficiently and effectively. Dissemination is also a key element to the effective use of fire support coordination measures and ample time (three to six hours) should be allowed in dissemination to insure their inviolability and thus the safety of friendly forces.
7. (U) LESSON LEARNED: The interpretation of the FSCL must be clearly defined by the JTF Commander in the operational order.
8. (U) RECOMMENDED ACTION: Place greater emphasis on the efficient use of fire support coordination measures during Phase I of the Unified Endeavor exercise series.
9. (U) COMMENTS: (50950-60911) None.

**APPENDIX F****ARMY-AIR FORCE WARFIGHTER CONFERENCE MESSAGE**

UNCLASSIFIED

DTG: 172201Z DEC 96

From: HQDA WASHINGTON DC//DACS-ZA//  
To: HQ USAF WASHINGTON DC//CC/CV//  
HQDA WASHINGTON DC//DACS-ZZ//  
USCINCEUR ALT SHAPE BE//ECCC//  
USCINCEUR VAIHINGEN GE//DC//  
USCENTCOM MACDILL AFB FL//CCCC//  
CINCUNC SEOUL KOR//CC//  
CDRTRADOC FT MONROE VA//ATCB//  
CDRUSAREUR HEIDELBERG GE//AIACC//  
USCINCSOC MACDILL AFB FL//SCCC//  
CDRAMC ALEXANDRIA VA//AMCG//  
USCINCSO QUARRY HEIGHTS PM//CC//  
CDRFORSCOM FT MCPHERSON GA//AFCG//  
HQDA WASHINGTON DC//DACS-ZC//  
CDRUSACAC FT LEAVENWORTH KS//CG//  
CDRXVIIIABNCORPS FT BRAGG NC//AFZA-CG//  
CDRUSARPAC FT SHAFTER HI//APCG//  
HQDA WASHINGTON DC//DAMO-ZA//  
CDRUSASSDC ARLINGTON VA//CSSD-ZA//  
CNGE WASHINGTON DC//NGB-ZA//  
CDRUSAADACS FT BLISS TX//CG//  
ALMAJCOM//CC//  
USCINCSTRAT OFFUTT AFB NE//CC//  
HQ USEUCOM DCINC VAIHINGEN//GE//  
NGB WASHINGTON DC//CC//

UNCLAS

PERSONAL FOR GEN MOORMAN; GEN GRIFFITH; GEN JOULWAN; GEN PEAY; GEN TILLELLI; GEN HARTZOG; GEN CROUCE; GEN SHELTON; GEN WILSON; GEN CLARK; GEN BRAMLETT; LTG GARNER; LTG HOLDER; LTG KEANE; LTG STEELE; LTG SHINSEKI; LTG ANDERSON; MG NAVAS; MG COSTELLO; GEN BOLES; GEN ESTES; GEN HABIGER; GEN HAWLEY; GEN JAMERSON; GEN KROSS; GEN LORBER; GEN RUTHERFORD; GEN RYAN; GEN VICCELLIO; LTGEN JUMPER; MAJGEN CASE; MAJGEN HOBSON; MAJGEN MCINTOSE; MAJGEN SHEPPARD; FROM GEN REIMER AND GEN FOGLEMAN

SUBJECT: JOINT AGREEMENT FROM ARMY-AIR FORCE WARFIGHTER  
CONFERENCE

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1. THIS IS A JOINT CSA-CSAF MESSAGE.
2. ARMY-AIR FORCE WARFIGHTER CONFERENCE AT FT BLISS, 4-5 DEC 96, WAS INTELLECTUALLY STIMULATING AND PRODUCTIVE NOT ONLY FOR BOTH SERVICES, BUT ALSO FROM A JOINT PERSPECTIVE. MOST IMPORTANTLY, WE MADE TANGIBLE PROGRESS AND IN MOST CASES, REACHED AGREEMENT IN RESOLVING SOME LONGSTANDING JOINT DOCTRINAL ISSUES BETWEEN OUR SERVICES.
3. THE FOLLOWING PARAGRAPHS HIGHLIGHT OUR AGREEMENTS AT THE CONFERENCE.
  - A. PREDATOR UAV: ON THE ISSUE OF DYNAMIC RETASKING, THE AIR FORCE IS COMMITTED TO MEETING THE ARMY'S COMMAND AND CONTROL TIMELINES FOR PREDATOR. THE CHALLENGE REMAINS IN GETTING THE UAV RETASKED ON A TIMELY BASIS FROM THE ELEMENT DESIGNATED IN THE ATO TO THE ELEMENT REQUESTING SUPPORT UNDER DYNAMIC RETASKING.
  - B. POPE AFB: THE AIR FORCE WILL MAKE NO ATTEMPT TO SIGNIFICANTLY REDUCE PRESENCE OR CAPABILITIES AT POPE AFB PROVIDED TO XVIII CORPS. BOTH SERVICES AGREED TO EXAMINE REGIONALIZATION INITIATIVES IN AREAS WHERE BOTH SERVICES HAVE FACILITIES THAT ARE COLOCATED OR IN CLOSE PROXIMITY TO ACHIEVE DOLLAR SAVINGS AND ENHANCE EFFICIENCY. GEN ESTES WILL INITIATE THE EFFORT IN THE COLORADO SPRINGS AREA; GEN BRAMLETT WILL TAKE THE ARMY LEAD.
  - C. C17: BOTH SERVICES AGREED THAT A COMMON DEFINITION OF SEMI- PREPARED (OTHER THAN PAVED) RUNWAYS IS NEEDED. THE TWO DSCOPS WILL WORK THE ISSUE AND DEVELOP A JOINT DEFINITION BY MID-JANUARY 1997. THE AIR FORCE FURTHER AGREED TO MODIFY THE C17 AND EQUIP IT WITH A PRECISION APPROACH CAPABILITY, THUS REDUCING THE REQUIREMENT FOR PREPOSITIONED NAVIGATIONAL EQUIPMENT. ON THE STATIC LINE ISSUE, BOTH SERVICES AGREED TO CONTINUE WORKING THE OPTIONS AND THE TESTING EFFORTS. IF REQUIRED, THE AIR FORCE AGREED TO PAY FOR CHANGING THE STATIC LINES AT THE EXPENSE OF FURTHER MODS TO THE C17.
  - D. ARMY AFTER NEXT (AAN): THE ARMY AGREED TO INCORPORATE MORE JOINTNESS IN THE AAN PRESENTATION.
  - E. COMBAT ID: THE ARMY, AND SPECIFICALLY TRADOC, AGREED TO EXAMINE, AFTER THE TASK FORCE XXI ADVANCED WARFIGHTING EXPERIMENT, THE INTERFACE BETWEEN THE AIR FORCE'S SITUATIONAL AWARENESS DATA LINK (SADL) ON THE F16 AND EPLRS.
  - F. JOINT PUB 3-09 (JOINT FIRES): BOTH SERVICES AGREED:**
    - (1) TO DELETING THE NOTIONAL GRAPHIC DEPICTING JOINT FIRES AND THE RELATED LANGUAGE FROM JOINT PUB 3-09.**

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**(2) TO CHANGING THE NAME OF THE JOINT FORCES FIRE COORDINATOR (JFFC) SO IT DOES NOT CONNOTE ANY COMMAND FUNCTION AND WOULD BE AN OPTION PRIMARILY FOR JTF'S**

**(3) THAT ELEMENTS OF THE FIRES HIERARCHY BE DEFINED IN TERMS OF "EFFECTS" RATHER THAN SPECIFIC PLATFORMS.**

**(4) THAT THE SURFACE COMPONENT COMMANDER IS THE SUPPORTED COMMANDER FOR JOINT FIRES THROUGHOUT HIS AREA OF OPERATIONS. BEYOND THE SURFACE COMPONENT COMMANDERS' BOUNDARIES, THE ACC IS THE SUPPORTED COMMANDER. IN THE DELIBERATE PLANNING PROCESS, ALL TARGETS FOR JOINT FIRES WILL BE COORDINATED TO THE MAXIMUM EXTENT POSSIBLE.**

**(5) THAT ALL TARGETS FORWARD OF THE FSCL AND INSIDE THE GCC'S AREA OF OPERATIONS WILL BE COORDINATED WITH ALL AFFECTED COMMANDERS TO THE MAXIMUM EXTENT POSSIBLE. IF NOT PRACTICAL BECAUSE OF TIME SENSITIVITY, EMERGENCY OR EXCEPTIONAL CIRCUMSTANCES, THEN ALL AFFECTED COMMANDERS WILL BE INFORMED WITH THE COMMANDER EXECUTING THE MISSION ACCEPTING THE OPERATIONAL RISK.**

**G. JOINT PUB 3-01 (COUNTERING AIR AND MISSILE THREATS): BOTH SERVICES AGREED:**

**(1) THAT ANY ARFOR ASSETS APPORTIONED BY THE JFC TO THE JFACC FOR COUNTERAIR MISSIONS WOULD BE IN DIRECT SUPPORT (VICE TACON) TO THE JFACC. THIS INCLUDES ASSETS AT THE EAC LEVEL.**

**(2) THAT IN TERMS OF FORCE PROTECTION OPERATIONS, COMMANDERS HAVE THE RIGHT TO TAKE BOTH OFFENSIVE AND DEFENSIVE ACTIONS.**

**(3) THAT SPECIFIC LANGUAGE WOULD BE INCORPORATED IN JOINT PUB 3-01 THAT ADDRESSES HOW COUNTERAIR PRIORITIES, TO INCLUDE TMD PRIORITIES, ARE DETERMINED AND APPROVED BY THE JFC.**

**(4) THAT THE GCC IS THE SUPPORTED COMMANDER WITHIN HIS AREA OF OPERATIONS FOR COUNTERAIR ATTACK OPERATIONS AND THAT OCA TARGETS WOULD BE COORDINATED IAW PARA 2F(5) ABOVE.**

**(5) THAT COUNTERAIR BE DEFINED IN TERMS OF "EFFECTS" RATHER THAN SPECIFIC PLATFORMS.**

**4. AS A RESULT OF THIS CONFERENCE, WE HAVE FINALLY BROKEN THE DOCTRINAL LOGJAM ON JOINT PUBS 3-01 AND 3-09. COLLECTIVELY, WE WILL PRESS THE J7 FOR PROMPT CLOSURE AND CJCS APPROVAL OF BOTH PUBS WHICH WILL ENHANCE OUR JOINT WARFIGHTING CAPABILITY. WE APPRECIATE YOUR PARTICIPATION, CANDID COMMENTS AND CONTRIBUTIONS IN COMING TO GRIPS WITH SOME TOUGH BUT IMPORTANT ISSUES FOR BOTH OUR SERVICES AND THE JOINT TEAM. HAVE A GREAT HOLIDAY.**

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## GLOSSARY

### PART I - ABBREVIATIONS AND ACRONYMS

AFDC	Air Force Doctrine Center
AO	area of operations
AOC	air operations center
AOR	area of responsibility
ATACMS	Army tactical missile system
ATO	air tasking order
BCE	battlefield coordination element
BCD	battlefield coordination detachment
BCWG	battlefield coordination working group
BDA	battle damage assessment
C4	command, control, communications, and computers
CA	combat assessment
C2W	command and control warfare
CACC	commander, air component command
CALCM	conventional air launched cruise missile
CAP	crisis action procedures
CAS	close air support
CGCC	commander, ground component command
CJTF	commander, joint task force
COA	course of action
CUWTF	combined unconventional warfare task force
DBSL	deep battle synchronization line
EW	electronic warfare
FSE	fire support element
FSC	fire support coordinator
FSCL	fire support coordination line
FSCM	fire support coordination measures
FSCoord	fire support coordinator
GAT	guidance, apportionment, and targeting
HQDA	Headquarters, Department of the Army
HPT	high payoff targets
HPTL	high payoff target list

HVT	high value targets
HVTL	high value target list
IO	information operations
IW	information warfare
JAOC	joint air operations center
JEL	joint electronic library
JC2WC	Joint Command and Control Warfare Center
JFACC	joint force air component command
JFC	joint force commander
JFFC	joint force fires coordinator
	joint force firepower coordinator
JGAT	joint guidance, apportionment, and targeting
JIC	joint intelligence center
JIPTL	joint integrated prioritized target list
JOA	joint operations area
JOC	joint operations center
JPG	joint planning group
JPOTF	joint psychological operations task force
JSOTF	joint special operations task force
JTCB	joint targeting coordination board
JTF	joint task force
JTL	joint target list
JULLS	Joint Universal Lessons Learned System
JWFC	Joint Warfighting Center
MAAP	master air attack plan
MAP	master attack plan
MLRS	multiple launch rocket system
MOOTW	military operations other than war
NCA	National Command Authorities
NFA	no fire area
OPSEC	operations security
OT	observer/trainer
PSYOP	psychological operations
RFA	restricted fire area
ROE	rules of engagement
RTL	restricted target list

SEAD	suppression of enemy air defenses
SME	subject matter expert
SOF	special operations forces
SOLE	special operations liaison element
SOP	standard operating procedures
TARBUL	targeting bulletin
TLAM	Tomahawk land attack missile
TRADOC	US Army Training and Doctrine Command
UJTL	universal joint task list
USACOM	US Atlantic Command
USEUCOM	US European Command
USPACOM	US Pacific Command
USCENTCOM	US Central Command

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## PART II - TERMS AND DEFINITIONS

**apportionment.** In the general sense, distribution for planning of limited resources among competing requirements. Specific apportionments (e.g., air sorties and forces for planning) are described as apportionment of air sorties and forces for planning, etc. (Joint Pub 1-02)

**area of operations.** An operational area defined by the joint force commander for land and naval forces. Areas of operation do not typically encompass the entire operational area of the joint force commander, but should be large enough for component commanders to accomplish their missions and protect their forces. See also **area of responsibility; joint operations area.** (Joint Pub 1-02)

**area of responsibility.** 1. The geographical area associated with a combatant command within which a combatant commander has authority to plan and conduct operations. 2. In naval usage, a predefined area of enemy terrain for which supporting ships are responsible for covering by fire on known targets or targets of opportunity and by observation. Also called **AOR.** (Joint Pub 1-02)

**battle damage assessment.** The timely and accurate estimate of damage resulting from the application of military force, either lethal or non-lethal, against a predetermined objective. Battle damage assessment can be applied to the employment of all types of weapon systems (air, ground, naval, and special forces weapon systems) throughout the range of military operations. Battle damage assessment is primarily an intelligence responsibility with required inputs and coordination from the operators. Battle damage assessment is composed of physical damage assessment, functional damage assessment, and target system assessment. Also called **BDA.** (Joint Pub 1-02)

**battlefield coordination element.** An Army liaison provided by the Army component commander to the Air Operations Center (AOC) and/or to the component designated by the joint force commander to plan, coordinate, and deconflict air operations. The battlefield coordination element processes Army requests for tactical air support, monitors and interprets the land battle situation for the AOC, and provides the necessary interface for exchange of current intelligence and operational data. Also called **BCE.** (Joint Pub 1-02)

**command and control warfare.** The integrated use of operations security, military deception, psychological operations, electronic warfare, and physical destruction, mutually supported by intelligence, to deny information to, influence, degrade, or destroy adversary command and control capabilities, while protecting friendly command and control capabilities against such actions. (Joint Pub 1-02)

**fire.** 1. The command given to discharge a weapon(s). 2. To detonate the main explosive charge by means of a firing system. (Joint Pub 1-02)

**firepower.** 1. The amount of fire which may be delivered by a position, unit, or weapon system. 2. Ability to deliver fire. (Joint Pub 1-02)

**fire support coordinating measure.** A measure employed by land or amphibious commanders to facilitate the rapid engagement of targets and simultaneously provide safeguards for friendly forces. See also **fire support coordination.** (Joint Pub 1-02)

**fire support coordination.** The planning and executing of fire so that targets are adequately covered by a suitable weapon or group of weapons. (Joint Pub 1-02)

**fire support coordination center.** A single location in which are centralized communications facilities and personnel incident to the coordination of all forms of fire support. (Joint Pub 1-02)

**fire support coordination line.** A line established by the appropriate land or amphibious force commander to ensure coordination of fire not under the commander's control but which may affect current tactical operations. The fire support coordination line is used to coordinate fires of air, ground, or sea weapons systems using any type of ammunition against surface targets. The fire support coordination line should follow well-defined terrain features. The establishment of the fire support coordination line must be coordinated with the appropriate tactical air commander and other supporting elements. Supporting elements may attack targets forward of the fire support coordination line without prior coordination with the land or amphibious force commander provided the attack will not produce adverse surface effects on or to the rear of the line. Attacks against surface targets behind this line must be coordinated with the appropriate land or amphibious force commander. Also called **FSCL**. (Joint Pub 1-02)

**interdiction.** An action to divert, disrupt, delay, or destroy the enemy's surface military potential before it can be used effectively against friendly forces. (Joint Pub 1-02)

**joint force air component commander.** The joint force air component commander derives authority from the joint force commander who has the authority to exercise operational control, assign missions, direct coordination among subordinate commanders, redirect and organize forces to ensure unity of effort in the accomplishment of the overall mission. The joint force commander will normally designate a joint force air component commander. The joint force air component commander's responsibilities will be assigned by the joint force commander (normally these would include, but not be limited to, planning, coordination, allocation, and tasking based on the joint force commander's apportionment decision). Using the joint force commander's guidance and authority, and in coordination with other Service component commanders and other assigned or supporting commanders, the joint force air component commander will recommend to the joint force commander apportionment of air sorties to various missions or geographic areas. Also called **JFACC**. (Joint Pub 1-02)

**joint force commander.** A general term applied to a combatant commander, subunified commander, or joint task force commander authorized to exercise combatant command (command authority) or operational control over a joint force. Also called **JFC**. (Joint Pub 1-02)



**joint integrated prioritized target list.** A prioritized list of targets and associated data approved by a joint force commander, and maintained by a joint task force. Targets and priorities are derived from the recommendations of components in conjunction with their proposed operations supporting the joint force commander's objectives and guidance. Also called **JIPTL**. (Joint Pub 1-02)

**joint intelligence center.** The intelligence center of the joint force headquarters. The joint intelligence center is responsible for providing and producing the intelligence required to support the joint force commander and staff, components, task forces and elements, and the national intelligence community. Also called **JIC**. (Joint Pub 1-02)

**joint operations area.** An area of land, sea, and airspace, defined by a geographic combatant commander or subordinate unified commander, in which a joint force commander (normally a joint task force commander) conducts military operations to accomplish a specific mission. Joint operations areas are particularly useful when operations are limited in scope and geographic area or when operations are to be conducted on the boundaries between theaters. Also called **JOA**. See also **area of responsibility**. (Joint Pub 1-02)

**joint staff.** 1. The staff of a commander of a unified or specified command, subordinate unified command, joint task force, or subordinate functional component (when a functional component command will employ forces from more than one Military Department), which includes members from the several Services comprising the force. These members should be assigned in such a manner as to ensure that the commander understands the tactics, techniques, capabilities, needs, and limitations of the component parts of the force. Positions on the staff should be divided so that Service representation and influence generally reflect the Service composition of the force. 2. (capitalized as Joint Staff) The staff under the Chairman of the Joint Chiefs of Staff as provided for in the National Security Act of 1947, as amended by the Goldwater-Nichols Department of Defense Reorganization Act of 1986. The Joint Staff assists the Chairman and, subject to the authority, direction, and control of the Chairman, the other members of the Joint Chiefs of Staff and the Vice Chairman in carrying out their responsibilities. (Joint Pub 1-02)

**joint targeting coordination board.** A group formed by the joint force commander to accomplish broad targeting oversight functions that may include but are not limited to coordinating targeting information, providing targeting guidance and priorities, and preparing and/or refining joint target lists. The board is normally comprised of representatives from the joint force staff, all components, and if required, component subordinate units. Also called **JTCB**. See also **joint target list**. (Joint Pub 1-02)

**joint target list.** A consolidated list of selected targets considered to have military significance in the joint operations area. (Joint Pub 1-02)

**joint task force.** A joint force that is constituted and so designated by the Secretary of Defense, a combatant commander, a subunified commander, or an existing joint task force commander. Also called **JTF**. (Joint Pub 1-02)

**master air attack plan.** A plan that contains key information that forms the foundation of the joint air tasking order. Sometimes referred to as the air employment plan or joint air tasking order shell. Information which may be included: joint force commander guidance, joint force air component commander guidance, support plans, component requests, target update requests, availability of capabilities/forces, target information from target lists, aircraft allocation, etc. Also called **MAAP**. (Joint Pub 1-02)

**no-strike target list.** A list designated by a commander containing targets not to be destroyed. Destruction of targets on the list would interfere with or unduly hamper projected friendly military operations, or friendly relations with indigenous personnel or governments. (Joint Pub 1-02)

**operational art.** The employment of military forces to attain strategic and/or operational objectives through the design, organization, integration, and conduct of strategies, campaigns, major operations, and battles. Operational art translates the joint force commander's strategy into operational design, and, ultimately, tactical action, by integrating the key activities at all levels of war. (Joint Pub 1-02)

**operational level of war.** The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or areas of operations. Activities at this level link tactics and strategy by establishing operational objectives needed to accomplish the strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they ensure the logistic and administrative support of tactical forces, and provide the means by which tactical successes are exploited to achieve strategic objectives. (Joint Pub 1-02)

**operation annexes.** Those amplifying instructions which are of such a nature, or are so voluminous or technical, as to make their inclusion in the body of the plan or order undesirable. (Joint Pub 1-02)

**operation order.** A directive issued by a commander to subordinate commanders for the purpose of effecting the coordinated execution of an operation. Also called **OPORD**. (Joint Pub 1-02)

**targeting.** 1. The process of selecting targets and matching the appropriate response to them taking account of operational requirements and capabilities. 2. The analysis of enemy situations relative to the commander's mission, objectives, and capabilities at the commander's disposal, to identify and nominate specific vulnerabilities that, if exploited, will accomplish the commander's purpose through delaying, disrupting, disabling, or destroying enemy forces or resources critical to the enemy. (Joint Pub 1-02)